

```

=>
L1 STRUCTURE UPLOADED
=> d 11
L1 HAS NO ANSWERS
L1 STR
/ Structure 1 in file gsa /

Structure attributes must be viewed using STN Express query preparation.

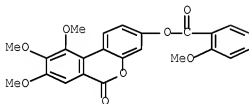
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SAMPLE SCREEN SEARCH COMPLETED - 979 TO ITERATE
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SEARCH TIME: 00:00:01
FULL FILE PROJECTIONS: ONLINE **COMPLETE**
RATCH **COMPLETE**
PROJECTED ITERATIONS: 17105 TO 21450
PROJECTED ANSWERS: 0 TO 0
L2 0 SEA FSM SAM L1

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SAMPLE SCREEN SEARCH COMPLETED - 34553 TO ITERATE
4 ON PROCESSED 2000 ITERATIONS 31 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00:00:01
FULL FILE PROJECTIONS: ONLINE **COMPLETE**
RATCH **COMPLETE**
PROJECTED ITERATIONS: 679109 TO 701811
PROJECTED ANSWERS: 9312 TO 12086
L3 31 SEA SSS SAM L1

=> d sss

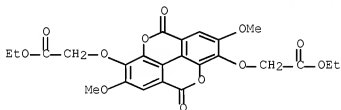
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L3 31 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
 Author/Inventor
 Benzoic acid, 2-methoxy-, 5,9,10-trimethoxy-6-oxo-6H-dibenzo[b,d]pyran-3-yl ester
 HT Structure



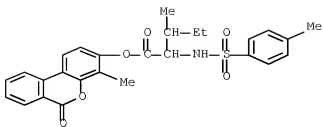
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 31 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
 Author/Inventor
 Acetic acid, 2,2'-(5,10-dihydro-2,7-dimethoxy-5,10'-dioxo[1]benzopyrro[5,4,3-cde][1]benzopyran-3,8-diylbis(oxy)bis-, diethyl ester (dCI)
 HT Structure



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 31 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
 Author/Inventor
 INDEX NAME NOT YET ASSIGNED
 HT Structure



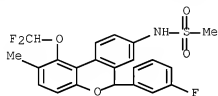
PROPERTY DATA AVAILABLE IN THE "PROD" FORMAT

L3 31 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

Author(s)

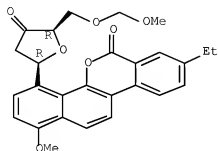
Methanesulfonamide, N-[1-(difluoromethoxy)-6-(3-fluorophenyl)-2-methyl-4H-benzo[b]pyran-8-yl]-

Hydrotol



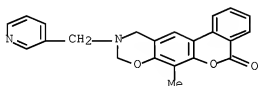
PROPERTY DATA AVAILABLE IN THE "PROD" FORMAT

L3 31 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
 Author/Inventor
 6H-[Benzoxo]pyrrolo[1,2-b]pyran-6-one, 8-ethyl-1-methoxy-4-[tetrahydro-3-[(methoxymethyl)methyl]-4-oxo-2-oxanyl]- (2R-cis) (9CI)
 H# Structure

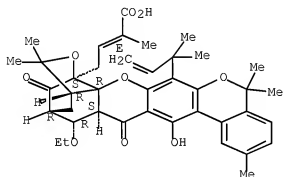


PROPERTY DATA AVAILABLE IN THE "PROP" FORMAT

L3 31 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
 Author/Inventor
 INDEX NAME NOT YET ASSIGNED
 H# Structure

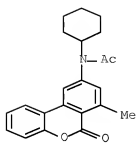


L3 31 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
 Author/Inventor
 2-Sulfinic acid, 4-[(1R,3aS,3b,8S,8aR,16aS)-15-(1,1-dimethyl-2-propen-1-yl)-6-ethoxy-3a,4,5,6,6a,7-tetrahydro-9-hydroxy-3,3,10,13,13-pentamethyl-7,17-dioxo-1,5-methano-1H,3H,13H-[2]benzopyran[4,3-b]furo[2,4-g]xanthan-1-yl]-2-methyl-, (2E)-rel-(+)-
 H# Structure



PROPERTY DATA AVAILABLE IN THE "PROP" FORMAT

L3 31 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
 Author/Inventor
 Acetamide, N-cyclohexyl-N-(7-methyl-6-oxo-6H-benzoxo[6,7-b]pyran-9-yl)-
 H# Structure



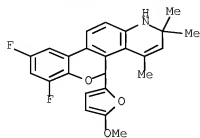
PROPERTY DATA AVAILABLE IN THE "PROP" FORMAT

L3 31 ANSWERD REGISTRY COPYRIGHT 2009 ACS on STN

Author/Inventor:

1H-[1]Benzopyran[3,4-g]quinoline, 7,9-difluoro-2,3-dihydro-5-(3-methoxy-2-benzyl)-2,2,4-trimethyl-

Hit Structure



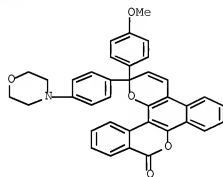
PROPERTY DATA AVAILABLE IN THE "PROP" FORMAT

L3 31 ANSWERD REGISTRY COPYRIGHT 2009 ACS on STN

Author/Inventor:

2H,10H-Dibenz[*a,h*]pyran[2,3-*g'*][1]benzopyran-10-one, 2-[4-(4-morpholinyl)phenyl]-2-[4-(4-morpholinyl)phenyl]- (9C)

Hit Structure



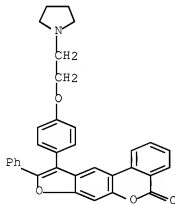
PROPERTY DATA AVAILABLE IN THE "PROP" FORMAT

L3 31 ANSWERD REGISTRY COPYRIGHT 2009 ACS on STN

Author/Inventor:

5H-[2]Benzopyran[4,3-f]benzofuran-5-one, 8-phenyl-10-[4-(2-(1-pyrrolidinyl)ethoxy)phenyl]-

Hit Structure

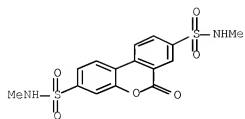


PROPERTY DATA AVAILABLE IN THE "PROP" FORMAT

L3 31 ANSWERD REGISTRY COPYRIGHT 2009 ACS on STN

Author/Inventor:

INDEX NAME NOT YET ASSIGNED
Hir Structure



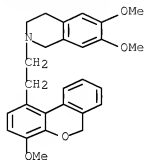
PROPERTY DATA AVAILABLE IN THE "PROP" FORMAT

L3 31 ANSWERS: REGISTRY COPYRIGHT 2009 ACS on STN

Author: Inventor

Incopatoline: 1,2,3,4-tetrahydro-6,7-dimethoxy-2-[2-(4-methoxy-6H-dibenz[b,d]pyran-1-yl)ethyl]-hydrazide (1:1)

HM Structure



● HC1

=> a 11 fcm full
FULL SEARCH INITIATED 11x12x13 FILE "REGISTRY"
FULL SCREEN SEARCH COMPLETED - 19500 TO ITERATE
100.0% PROCESSED 19500 ITERATIONS 5 ANSWERS
SEARCH TIME: 00.00(01)

L4 5 REA FCM FUL L3

=> a 14

L5 59 L4

=> d scan

L5 59 ANSWERS: CAPLUS COPYRIGHT 2009 ACS on STN

Title Catalytic Direct Arylation with Aryl Chlorides, Bromides, and Iodides: Intramolecular Studies Leading to New Intermolecular Reactions

L5 59 ANSWERS: CAPLUS COPYRIGHT 2009 ACS on STN

Title Simple and Efficient TiCl4-Mediated Synthesis of Biaryls via Arylmagnesium Compounds

L5 59 ANSWERS: CAPLUS COPYRIGHT 2009 ACS on STN

Title Photocyclization of o-phenyloxybenzyl alcohols in aqueous solution. A simple synthesis of 6H-dibenz[b,d]pyrans

→ d ikib abe bilate 1-
YOU HAVE REQUESTED DATA FROM 59 ANSWERS - CONTINUE? Y/N(1)

L5 ANSWER 1 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number

2008 1406109 CAPLUS [Full-text](#)

Title

Analysis of chemical constituents of the volatile of from *Artemisia argy* by GC/MS

Author/Inventor

Xu, Xinjian, Song, Hai, Han, Yuqi, Yang, Wenlong, Zhao, Li

Patent Assignee/Corporate Source

Key Laboratory of Resources and Environment, Chemistry of West China, Department of Chemistry, Huzhou University, Zhejiang, Gansu Province, 734000, Peop. Rep. China

Source

Shichen Guoyi Guoyao (2007), 18(11), 2657-2658 CODEN SGGHAI, ISSN: 1008-0805

Document Type

Journal

Language

Chinese

Abstract

The chemical constituents of the volatile of from *Artemisia argy* L. var. *argy* were analyzed. The volatile oil was extracted from *Artemisia argy* L. var. *argy* by steam distillation. The components of the volatile oil were separated and identified by GC/MS. The relative content of each component was determined by area normalization. Fifty-four kinds of components were separated. Among them, thirty-eight components were identified, accounting about 78.92% of the total volatile oil. The main components in the volatile oil of *Artemisia argy* L. var. *argy* were 7-ethyl-1,4-dimethyl-8-octene (17.34%), eucalyptol (10.37%) and β -limonene (8.10%) etc.

Hit Structure

CAS Registry Number

229-95-8 CAPLUS

Chemical or Trade Name

6H-Dibenzol(b,d)pyran (CA INDEX NAME)



L5 ANSWER 2 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number

2008 1503095 CAPLUS [Full-text](#)

Document Number

149 555 101

Title

Alylic and benzylic carboniums substituted by heteroatoms

Author/Inventor

Bellmann, Jean-Francois, Ducoat, Jean-Bernard

Patent Assignee/Corporate Source

Strasbourg, Fr

Source

Organic Reactions (Hoboken, NJ, United States) (1982), 27, No pp given CODEN: ORHNBA URL: <http://www.interscience.wiley.com/jup/bintmwhome/107610747/HOME>

Document Type

Journal General Review, (online computer file)

Language

English

Abstract

A review of the article Alylic and benzylic carboniums substituted by heteroatoms.

Hit Structure

CAS Registry Number

229-95-8 CAPLUS

Chemical or Trade Name

6H-Dibenzol(b,d)pyran (CA INDEX NAME)



L5 ANSWER 3 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number

2008 1503066 CAPLUS [Full-text](#)

Document Number

149 555 080

Title

The intramolecular Heck reaction

Author/Inventor

Link, J. T.

Patent Assignee/Corporate Source

Abbott Laboratories, Abbott Park, IL, USA

Source

Organic Reactions (Hoboken, NJ, United States) (2002), 66, No pp given CODEN: ORHNBA URL: <http://www.interscience.wiley.com/jup/bintmwhome/107610747/HOME>

Document Type

Journal General Review, (online computer file)

Language

English

Abstract

A review of the article The intramolecular Heck reaction

Hit Structure

CAS Registry Number

229-95-8 CAPLUS



Chemical or Trade Name
6H-Gibenz[a,d]pyren- (CA INDEX NAME)



L5 ANSWER 4 OF 55 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number

20081200554 CAPLUS [Fulltext](#)

Document Number

148 471179

Title

Novel and Rapid Palladium-Assisted 6- Electrocyclic Reaction Affording 9,10-Dihydrophenanthrene and its Analogues

Author/Inventor

Jana, Rathan, Chatterjee, Indrani, Samanta, Shubhankar, Ray, Joyanta K.

Patent Assignee/Corporate Source

Department of Chemistry, Indian Institute of Technology, Kharagpur, 721302, India

Source

Organic Letters (2008), 10(21), 4795-4797 CODEN ORLEF7; ISSN: 1523-7060

Document Type

Journal

Language

English

Abstract

A novel methodol. for the synthesis of 9,10-dihydrophenanthrene and its analogs, e.g., 1, has been developed via a palladium-assisted 6- electrocyclic reaction of dihydropyrenyl(bromodihydroanthracene) derivs., followed by formaldehyde elimination.

HR Structure

CAS Registry Number

229-95-8 CAPLUS

Chemical or Trade Name

6H-Gibenz[a,d]pyren- (CA INDEX NAME)



L5 ANSWER 5 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
2008 033593 CAPLUS [Full text](#)

Document Number
1482300706

Title

Mild and efficient palladium-catalyzed intramolecular direct arylation reactions

Author/Inventor

Lefebvre, Marc; Lapointe, David; Fagnou, Keith

Patent Assignee/Corporate Source

Center for Catalysis Research and Innovation, Department of Chemistry, University of Ottawa, Ottawa, ON, K1N 6N5, Can

Source

Tetrahedron (2008), 64(26), 6015-6020 CODEN: TETRAH, ISSN: 0040-4020

Document Type

Journal

Language

English

Abstract

The influence of ligand, stoichiometric base, and additive has been evaluated in the context of intramolecular direct arylation reactions. Under the optimal conditions, arylation of simple arenes can be performed under very mild conditions, with heating to 50 °C. The role of the pyridic acid additive is rationalized by invoking a concerted palladation-deprotonation pathway where the pyridate is behaving as either an intramolecular base from the palladium or through an external deprotonation in a similar manner as that previously described.

Hit Structure

CAS Registry Number

229-95-9 CAPLUS

Chemical or Trade Name

6H-Dibenzosilole, 6-phenyl (CA INDEX NAME)



L5 ANSWER 6 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
2008 190867 CAPLUS [Full text](#)

Document Number
1482304620

Title

Use of glucocorticoid receptor antagonists as immunostimulants for treatment of infectious conditions

Author/Inventor

Pearlman, B. w. m. m. Bernards

Patent Assignee/Corporate Source

N.V. Organon, Neth.

Source

PCT Int. Appl., 11pp CODEN: PPOXDE

Document Type

Patent

Language

English

Patent Information

PATENT NO	KIND	DATE	APPLICATION NO	DATE
WO 2006017658	A2	20060214	WO 2007-EP98134	20070606
WO 2006017658	A3	20060410		
AU 2007038604	A1	20060214	AU 2007-283604	20070606
EP 2051705	A2	20060429	EP 2007-780248	20070606
KR 2009039773	A	20060422	KR 2009-702988	20060213

Abstract

The invention provides the use of a glucocorticoid receptor antagonist for the manufacture of a medicament for immune stimulation, such as prevention or treatment of infections or infectious conditions, in an aging mammalian subject, a mammalian subject with low serum CHEAS values, a mammalian subject with a high serum cortisol/CHEAS ratio or a mammalian subject with high neutrophil counts. In particular, the glucocorticoid receptor antagonist can be chosen from the group consisting of a dibenzosilole derivative defined and/or exemplified in US6029534 and WO000116125, mifepristone, and (11b,17b)-11-(1,3-benzodisilole-5-yl)-17-hydroxy-17(1)-propenyltetra-4,8-dien-3-one.

Hit Structure

CAS Registry Number

229-95-9 CAPLUS

Chemical or Trade Name

6H-Dibenzosilole, 6-phenyl (CA INDEX NAME)



L5 ANSWER 7 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
2007 1300705 CAPLUS [Full text](#)

Document Number
147815077

Title

The use of a glucocorticoid receptor antagonist to treat depression in patients taking interferon-2

Author/Inventor

Belaroff, Joseph K.

Patent Assignee/Corporate Source

Concept Therapeutics, Inc., USA

Source
PCT Int. Appl. 35pp. CODEN: P00302

Document Type
Patent

Language
English

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007131041	A2	20071115	WO 2007-0568044	20070902
WO 2007131041	A3	20081009		
AU 2007248059	A1	20071115	AU 2007-248059	20070902
CA 2648894	A1	20071115	CA 2007-2648894	20070902
EP 2012796	A2	20060114	EP 2007-783115	20070902

Abstract

The invention pertains to the discovery that type II glucocorticoid receptor antagonists can be used in methods for reversing or inhibiting the symptoms of depression in patients receiving interleukin-2 treatment.

Hit Structure

CAS Registry Number
229-93-8 CAPLUS

Chemical or Trade Name
6R-Dibenz[a,b]pyrene (CA INDEX NAME)



L5 ANSWER # OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
2008 71452 CAPLUS Eufedat

Document Number
144 274064

Title
Catalytic Direct Arylation with Aryl Chlorides, Bromides, and Iodides: Intramolecular Studies Leading to New Interolecular Reactions

Author/Inventor

Campeau, Louis-Charles, Parisien, Mathieu, Jean, Annie, Fagnou, Keith

Patent Assignee/Corporate Source
Center for Catalysis Research and Innovation, Department of Chemistry, University of Ottawa, Ottawa, K1N 6N5, Can.

Source
Journal of the American Chemical Society (2006), 128(2), 581-590 CODEN: JACSAT; ISSN: 0002-7863

Document Type
Journal

Language
English

Abstract

A catalyst for the intramolecular direct arylation of a broad range of simple and heterocyclic arenes with aryl iodides, bromides, and chlorides has been developed. These reactions occur in excellent yield and are highly selective. Studies with aryl iodide substrates revealed that catalyst poisoning occurs due to the accumulation of iodide in the reaction media. This can be overcome by the addition of silver salts which also permits these reactions to occur at lower temperature. The utility of the methodology is illustrated by a rapid synthesis of a carbazole natural product and by the synthesis of sterically encumbered 1,4-ortho-substituted biaryls via ring-opening reactions of the direct arylation products. Mechanistic investigations have provided insight into the catalyst's mode of action and show the presence of a kinetically significant C-H bond cleavage in palladium-catalyzed direct arylation of simple arenes. Knowledge gathered from these studies has led to the development of new intramolecular arylation reactions with previously inaccessible arenes, opening the door for the development of other new direct arylation processes.

Hit Structure

CAS Registry Number
229-93-8 CAPLUS

Chemical or Trade Name
6R-Dibenz[a,b]pyrene (CA INDEX NAME)



L5 ANSWER 9 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
2009 182149 CAPLUS Fulltext

Document Number
144292196

Title
Solvolysis and ring closure of quinone methides photogenerated from biaryl systems

Author(s)
Shi, Yifan; Wan, Peter
Patent Assignee/Corporate Source
Department of Chemistry, University of Victoria, Victoria, BC, V8W 2Y6, Can

Source
Canadian Journal of Chemistry (2005), 83(9), 1306-1323 CODEN CJCCHG, ISSN 0008-4042

Document Type
Journal

Language
English

Abstract
A variety of biaryl quinone methides have been photogenerated with a range of efficiencies from biaryl precursors, all having hydroxyl and hydroxymethyl substituents on alternate rings. These novel biaryl quinone methides, which cannot be readily generated via thermal chemical, are trapped by added nucleophiles such as MeOH and ethanolamine, two that cannot undergo electrocyclic ring closure are readily observable by nanosecond laser photolysis, with long millisecond maxima (times) of 602 and 322 nm, resp. Photogenerated *o*-biaryl quinone methides undergo electrocyclic ring closure to give the corresponding chromene (oxant) products in high yield. Since the precursor biaryl also have highly twisted structures in the ground state (dihedral angle of up to 90° by mol. mechanics calcns.), a significant twisting motion to planarity is required to achieve reaction. Using steady-state fluorescence studies, we present evidence to suggest that the mechanism of quinone methide formation may occur via one of the following mechanisms: (i) dissociation of the proton from ArOH that precedes twisting, or (ii) *o*-C-H-dissociation and twisting taking place either simultaneously or in quick succession.

HR Structure

CAS Registry Number
229-35-8 CAPLUS

Chemical or Trade Name
6H-Dibenzo[b,d]pyran (CA INDEX NAME)



L5 ANSWER 10 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
2005 777815 CAPLUS Fulltext

Document Number
143368743

Title
Direct Arylation Reactions Catalyzed by Pd(OH)2C: Evidence for a Soluble Palladium Catalyst

Author(s)
Parsen, Mathieu; Valente, Damien; Fagnou, Keith
Patent Assignee/Corporate Source
Center for Catalysis Research and Innovation, Department of Chemistry, University of Ottawa, Ottawa, ON, K1N 6N5, Can.

Source
Journal of Organic Chemistry (2005), 70(19), 7378-7384 CODEN JOCEAH, ISSN 0022-0263

Document Type
Journal

Language
English

Abstract
Palladium hydride on carbon (Pearlman's catalyst) effectively catalyzes direct arylation reactions of aryl iodides and bromides, providing acellent arylation-to-hydrodehalogenation ratios (>30:1) with broad scope for both *ortho*- and *internal* arylation processes. E.g., arylation of thiazole by 4-BzC6H4Br gave 71% 3-(4-methylphenyl)thiazole. E.g., *internal* arylation of aryl iodide 1 gave 95% 6H-dibenzo[b,d]pyran 11. Studies aimed at determining the nature of the active catalyst indicate that an active homogeneous palladium species is produced under the reaction conditions.

HR Structure

CAS Registry Number
229-35-8 CAPLUS

Chemical or Trade Name
6H-Dibenzo[b,d]pyran (CA INDEX NAME)



L5 ANSWER 11 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
2005 1501703 CAPLUS Fulltext

Document Number
1437079

Title
High-yielding intramolecular direct arylation reactions with aryl chlorides

Author(s)
Campeau, Louis-Charles; Therasandine, Pierre; Fagnou, Keith
Patent Assignee/Corporate Source
Department of Chemistry, University of Ottawa, Ottawa, ON, K1N 6N5, Can.

Source
Organic Letters (2005), 7(9), 1857-1860 CODEN ORLEFF, ISSN 1523-7066

Document Type
Journal

Language
English

Abstract
An N-heterocyclic carbene palladium catalyst system was used to promote direct arylation of a broad range of aryl chlorides to form six- and five-membered ring biaryls, e.g., 1. An influence of the halide on the palladium pre-catalyst on catalyst activation has been revealed, as has a beneficial effect of NiCl2 salts that allowed the turnover nos. to be increased by simple addition of imidazolium salts to the reaction mixture.

HR Structure

CAS Registry Number
229-95-9 CAPLUS

Chemical or Trade Name
6R-Dibenz[a,b]pyren (CA INDEX NAME)



LS ANSWER 12 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
806455371 CAPLUS Fulltext

Document Number
141146284

Title
Baryl synthesis via direct arylation: establishment of an efficient catalyst for intramolecular processes

Author/Inventor
Campeau, Louis-Charles; Parisien, Mathieu; Leblanc, Maelisse; Fagnou, Keith

Patent Assignee/Corporate Source
Center for Catalysis Research and Innovation, University of Ottawa, Ottawa, ON, K1N 6N5, Can.

Source
Journal of the American Chemical Society (2004), 126(36), 9186-9187 CODEN: JACSAT, ISSN: 0002-7863

Document Type
Journal

Language
English

Abstract
The direct arylation reaction with improved scope and catalyst activity for the intramolecular formation of baryl compds., e.g., 1, is reported. This was achieved through the establishment of a highly active and robust catalyst system and the subsequent development of a phosphine ligand II. The enhanced catalytic activity, extended these transformations to include previously unreactive and poorly reactive substrates, and allowed for very low catalyst loadings.

Hit Structure

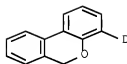
CAS Registry Number
229-95-9 CAPLUS

Chemical or Trade Name
6R-Dibenz[a,b]pyrene (CA INDEX NAME)



CAS Registry Number
725223-82-1 CAPLUS

Chemical or Trade Name
6R-Dibenz[a,b]pyrene-6-d (9CI) (CA INDEX NAME)



L5 ANSWER 13 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number 2004-923992 CAPLUS [Full-text](#)

Document Number 141 38470

Title Formal Radical Cyclization onto Benzene Rings: A General Method and Its Use in the Synthesis of anti-Nocardione A
Author/Inventor Chiu, Derrick L. J.; Fletcher, Stephen P.; Liu, Dazhan

Patent Assignee/Corporate Source Chemistry Department, University of Alberta, Edmonton, AB, T6G 2G2, Can
Source Journal of Organic Chemistry (2004), 69(16), 3282-3295 CODEN: JOCEAH, ISSN: 0022-0263

Document Type Journal

Language English

Abstract An indirect method is described for effecting radical cyclization onto a benzene ring. Cross-conjugated dienones, e.g. I, which are readily prepared from phenols, undergo radical cyclization, and the products, e.g. II, are easily aromatized. The method has been applied to the synthesis of (-)-anti-nocardione A (III).

Hit Structure

CAS Registry Number 223-351-9 CAPLUS
Chemical or Trade Name 6H-Dibenz(a,h)pyrene (CA INDEX NAME)



L5 ANSWER 14 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number 2003-934761 CAPLUS [Full-text](#)

Document Number 198 236041

Title Control of Kinetics and Thermodynamics of [1,3]-Shifts by Aromaticity: A View through the Prism of Marcus Theory
Author/Inventor Aldough, Igor V.; Manoharan, Manappan; Brenner, Boris; Lewis, Frederick D

Patent Assignee/Corporate Source Department of Chemistry and Biochemistry, Florida State University, Tallahassee, FL, 32306-4390, USA
Source Journal of the American Chemical Society (2003), 125(31), 9329-9342 CODEN: JACSAT, ISSN: 0002-7863

Document Type Journal

Language English

Abstract The effects of aromatic stabilization on the rates of [1,3]-H shifts in carbo- and heterocyclic dihydroarom. compds. were estimated by B3LYP/6-31G** computations. The aromatic stabilization energy of the product is directly translated into increased exothermicity of these reactions. Relative trends for a significant range of endothermic and exothermic [1,3]-shifts with different intrinsic activation energies are reliably described by Marcus theory. The effects of aromaticity or antiaromaticity are very large and can lead to dramatic acceleration or deceleration of [1,3]-H shifts and even to complete disappearance of the reaction barrier. Not only the activation energy but the shape and position of the reaction barrier can be efficiently controlled by changes in the aromaticity of the products, making these systems interesting models for studying H tunneling. Marcus theory can also be applied successfully to other pericyclic shifts such as [1,3]-shifts which involve C1 and Me transfer.

Hit Structure

CAS Registry Number 223-351-9 CAPLUS
Chemical or Trade Name 6H-Dibenz(a,h)pyrene (CA INDEX NAME)



L5 ANSWER 15 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number 2003-157411 CAPLUS [Full-text](#)

Document Number 198 26414

Title Formal radical cyclization onto benzene rings: a general method proceeding via cross-conjugated dienones
Author/Inventor Chiu, Derrick L. J.; Fletcher, Stephen P.; Zhu, Minghao

Patent Assignee/Corporate Source Chemistry Department, University of Alberta, Edmonton, AB, T6G 2G2, Can
Source Chemical Communications (Cambridge, United Kingdom) (2003), (4), 326-327 CODEN: CHCOPF, ISSN: 1369-7340

Document Type Journal

Language English

Abstract Cross-conjugated dienones, which are readily available from phenols, undergo radical cyclization, and the products were easily aromatized, giving substances that are formally derived by radical cyclization onto a benzene ring. E.g. 1,4-benzoquinone was brominated with 2-iodobenzoyl bromide using $\text{TiCl}_4/\text{CCl}_4$ in DMF to give 4-[[2-iodobenzoyl]benzoyl]benzene in 39% yield, which was subsequently treated with PhI(OAc)_2 , K_2CO_3 and MeOH to give diene I in 67% yield. I then underwent radical cyclization using AIBN and BuSCl in toluene to form cyclic ether II in 100% yield, which was in turn aromatized using TsOH and acetone in CH_2Cl_2 to give phenol III in 50% yield.

Hit Structure

CAS Registry Number
229-95-9 CAPLUS

Chemical or Trade Name
6R-Dibenz[a,b]pyrene (CA INDEX NAME)



L5 ANSWER 16 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
R062739395 CAPLUS Fulltext

Document Number
138304045

Title
Strategy for the identification of unknown POP

Author/Inventor
Schramm, K-W

Patent Assignee/Corporate Source
Institute of Ecological Chemistry, GSF-National Research Center for Environment and Health, Neuherberg, D-85764, Germany

Source
Organohalogen Compounds (2001), 53(Doxin 2001), 366-369 COOEN ORCOEP, ISSN 1626-4892

Document Type
Journal

Language
English

Abstract:

A novel test strategy was developed to identify samples of persistent organic pollutants (POP) based on their long-term or chronic toxic properties. POP consist of a priority sub-group called PST, defined as organic substances which are persistent, bioaccumulative, and possess toxic characteristics likely to cause adverse human health or environmental effects. A simple pretreatment of lipophilic extracts with modified SIC2 serves as an initial, easily performed attempt to identify unknown PST. Further toxicol. investigations of toxic compounds found and characterized will identify those as PST.

Hit Structure

CAS Registry Number
229-95-9 CAPLUS

Chemical or Trade Name
6R-Dibenz[a,b]pyrene (CA INDEX NAME)



L5 ANSWER 17 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
2002 271159 CAPLUS [Full-text](#)

Document Number
137 98964

Title
Engineering bacterial capable of degrading harmful chemicals

Author/Inventor

Fukushima, Kensuke

Patent Assignee/Corporate Source

Graduate School of Agriculture Research, Kyushu University, Japan

Source

Kagaku Kagyo (2002), 53(2), 101-106 CODEN KAKOAY, ISSN 0451-2014

Document Type

Journal, General Review

Language

Japanese

Abstract

A review on the introduction of gene(s) for bioremediation-associated enzymes into bacteria to prepare "superbugs" for the degradation of environmental pollutants such as polychlorinated biphenyl (PCB), single-ring aromatics, chlorophenyl and dioxin, trichloroethylene, etc.

Hit Structure

CAS Registry Number

279-93-8 CAPLUS

Chemical or Trade Name

6H-Dibenz[a,h]pyrene (CA INDEX NAME)



L5 ANSWER 18 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
2001 85069 CAPLUS [Full-text](#)

Document Number
134 31567

Title
A new cascade radical reaction for the synthesis of biaryls and triaryls from benzylidene ethers

Author/Inventor

Hartovren, D. C., Nunn, M. I. T., Newman, N. A., Fennick, D. R.

Patent Assignee/Corporate Source

Department of Chemistry, The University, Southampton, SO17 1BJ, UK

Source

Tetrahedron Letters (2001), 42(5), 961-964 CODEN TETLEA, ISSN 0040-4039

Document Type

Journal

Language

English

Abstract

A new method of synthesizing biaryls and triaryls through an intramolecular ipso-substitution reaction initiated by the addition of an aryl radical to a benzyl ether is described. A tandem variant of the reaction is also demonstrated.

Addl., a short synthesis of anisopropylamine, a natural product found in the improved tissue of *Geranium sanguinale*, is reported.

Hit Structure

CAS Registry Number

279-93-8 CAPLUS

Chemical or Trade Name

6H-Dibenz[a,h]pyrene (CA INDEX NAME)



L5 ANSWER 19 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
2002 852498 CAPLUS [Full-text](#)

Document Number
134 326206

Title
Simple and Efficient TiCl₄-Mediated Synthesis of Biaryls via Arylmagnesium Compounds

Author/Inventor

Ito, A., Kitagawa, K., Shinokubo, H., Oshima, K.

Patent Assignee/Corporate Source

Graduate School of Engineering, Department of Material Chemistry, Kyoto University, Daigo-ku, Kyoto, 606-8501, Japan

Source

Tetrahedron (2001), 56(49), 9601-9605 CODEN TETRAH, ISSN 0040-4039

Document Type

Journal

Language

English

Abstract

Oxidative self-coupling reactions of various arylmagnesium bromides (prepared from RCH₂CH₂-4, R = H, Me, COMe, CF₃, Br) with TiCl₄ affords the corresponding sym biaryls, such as 1, in moderate to good yields at 0° or at

lower temps. Tributylmagnesium-induced halogen-magnesium exchange of aryl halides followed by the coupling reaction provides biaryls in good yields under mild conditions. This method can achieve a one-pot synthesis of

biaryls containing functional groups such as esters, amides, or nitriles.

Hit Structure

CAS Registry Number

279-93-8 CAPLUS

Chemical or Trade Name

6H-Dibenz[a,h]pyrene (CA INDEX NAME)

Chemical or Trade Name
6H-Dibenz[a,d]pyrene (CA INDEX NAME)



L5 ANSWER 20 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
2006 62978 CAPLUS Bulletin

Document Number
152 207689

Title
CuCl₂-Mediated Intramolecular Oxidative Coupling of Aryl- and Alkylbimethylstannane Functions

Author/Inventor
Piers, Edward; Yee, James G. K.; Gladstone, Patricia L.

Patent Assignee/Corporate Source
Department of Chemistry, University of British Columbia, Vancouver, BC, V6T 1Z1, Can

Source
Organic Letters (2006), 2(4), 481-484 CODEN ORLEF7, ISSN 1523-7060

Document Type
Journal

Language
English

Abstract

The syntheses of bis-trimethylstannanes, e.g., 1 [R¹ = R² = R³ = H, X = OCH₂CH₂COCH₂CH₂CO₂Et] are described. Treatment of these substances with approx 5 equiv of CuCl₂ in DMF at rt for 30-60 min effects, in each case, oxidative coupling between the two sp² C-centers bearing the Me₃Sn function to produce good-to-excellent yields of biaryl products, e.g., 2. E.g., 1 [R¹ = R² = R³ = H, X = CH₂CO₂Et] is stirred in DMF at room temperature and upon addition of CuCl₂ to give a 78% yield of 2.

Hit Structure

CAS Registry Number
223-91-9 CAPLUS

Chemical or Trade Name
6H-Dibenz[a,d]pyrene (CA INDEX NAME)



L5 ANSWER 21 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
199718127 CAPLUS [Fulltext](#)

Document Number
126131302

Title
The chemistry and reactivity of aryl radicals - the C-C bond formation from o-bromobenzyl/phenyl ethers with tin hydride and azobisisobutyronitrile

Author/Inventor
Rissa, Ana M.; Lobo, Ana M.; Bianco, Paula G.; Prabhakar, Sundaresan
Patent Assignee/Corporate Source
Dep. Quimica, Univ. Nova Lisboa, Monte da Capica, 2825, Port

Source
Tetrahedron (1997), 53(1), 285-298 CODEN: TETRAH, ISSN: 0040-4020

Document Type
Journal

Language
English

Abstract
Treatment of 2-bromobenzyl Ph ethers and a two fold excess of tributyltin hydride (TBTHT) with 0.5 to 0.6 mol equivalent of AIBN induced an inefficient Cl-aryl bond formation. The structures of the products resulting from a 1,5 and/or a 1,6 aryls, were found to be largely determined by the presence or absence of the substituent and its position in the Ph ring. For example, the radical cyclization of 1-bromo-2-(phenoxymethyl)benzene gave 6H-dibenz[a,b]pyran.

Hit Structure

CAS Registry Number
229-95-9 CAPLUS
Chemical or Trade Name
6H-Dibenz[a,b]pyran (CA INDEX NAME)



L5 ANSWER 22 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
199318062 CAPLUS [Fulltext](#)

Document Number
11618062

Title
Part I. Novel syntheses of substituted-4H-dibenz[a,b]pyrene by Pashon cyclization; Part II. Syntheses and studies of mesomorphic compounds derived from 3-amino and 3-hydroxy-4H-dibenz[a,b]pyrans

Author/Inventor
Su, Wen Chen
Patent Assignee/Corporate Source
Kent State Univ., Kent, OH, USA

Source
(1991) 185 pp. Avail. Univ. Microfilms Int., Order No. DA9200535 From Dis. Abstr. Int. B 1992, 52(7), 3612

Document Type
Dissertation

Language
English

Abstract
Unavailable

Hit Structure

CAS Registry Number
229-95-9 CAPLUS
Chemical or Trade Name
6H-Dibenz[a,b]pyrene (CA INDEX NAME)



L5 ANSWER 23 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
1993141294 CAPLUS [Fulltext](#)

Document Number
116141294

Title
Determination of tetrachlorinated dibenzo-p-dioxins, dibenzofurans, and related compounds in the commercial herbicide 2,4-D

Author/Inventor
Bodak, E. S.; Klyuev, N. A.; Zhmukov, V. G.; Murenets, N. V.; Bocharov, B. V.; Rusanov, G. L.
Patent Assignee/Corporate Source
Inst. Arsen. Evol. Mirosh. Ecol., Moscow, Russia

Source
Zhurnal Analiticheskoi Khimii (1992), 47(8), 1487-543 CODEN: ZAKHAB, ISSN: 0044-4502

Document Type
Journal

Language
Russian

Abstract
Combined gas chromatog. and low-resolution mass spectroscopy were used to determine PCBs, di-Ph ethers, phenoxypheols, polychlorinated dibenzo-p-dioxins, xanthenes, and polychlorinated benzofurans in two com. samples of the herbicide 2,4-D. Total contents of tetrachlorinated dibenzo-p-dioxins and tetrachlorodibenzofurans in the first sample were 5.9 and 122.1 ng/g and in the second sample 2.6 and 76.0 ng/g, resp.; the most toxic TCDD level in the 2 samples was 0.1 and 0.002 ng/g, resp.

Hit Structure

CAS Registry Number
146442-65-1 CAPLUS

Chemical or Trade Name
68-Dibenzosilapyran, dihydro- (PCL) (CA INDEX NAME)



2 (D1—C1)

L5 ANSWER 24 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
1993123817 CAPLUS [Fulltext](#)

Document Number
118 123817

Title
"ValleyScan": A new two-bond drive technique for the calculation of potential energy surfaces with less computational effort

Author/Inventor
Bringmann, Gerhard, Guesenregen, Stefan, Busse, Holger

Patent Assignee/Corporate Source
Inst Org Chem., Univ. Wuerzburg, Wuerzburg, D-8700, Germany

Source
Journal of Computer-Aided Molecular Design (1992), 6(5), 505-12 CODEN: JCADEQ; ESN: 0920-454X

Document Type
Journal

Language
English

Abstract

A novel, CPU-time inexpensive two-bond drive technique, called ValleyScan, is described. It makes it possible to omit the chemical nonrelevant points of high energy, which are normally part of a two-dimensional (2D) grid scan. The new procedure works well for the calculation of the ring inversion of cyclic moieties, but should also be useful for other two-bond problems, e.g. side-chain movements in larger moieties (e.g. proteins). The algorithm is based upon pseudocode description and can easily be included in any mol. modeling software with an open user interface. Starting from an energy min., the scan scans the potential surface in all directions up to a user-defined energy limit. With this strategy, attention is paid only to the areas close to the stationary points - energetically higher structures do not have to be calculated. The procedure was applied to the test moieties 1,3-cyclohexadiene, 2H-pyran, and 6H-chloro[2,6]pyran.

Hit Structure

CAS Registry Number
229-91-8 CAPLUS

Chemical or Trade Name
68-Dibenzosilapyran, dihydro- (CA INDEX NAME)



L5 ANSWER 28 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
1993101685 CAPLUS [Full-text](#)

Document Number
118101685

Title
Origin of the [M - H]⁺ ion in flavanone

Author/Inventor

Outskopf, Federico H.; Kaliva, Juan; Santillan, Rosa L.; Garbay, Maria E.; Joseph-Nathan, Pedro
Patent Assignee/Corporate Source
Pac. Qum. Biogum Farm., Univ. Naz. San Luis, San Luis, 5700, Argent.

Source
Organic Mass Spectrometry (1992), 27(11), 1259-304 CODEN ORMSBO, ISSN 0030-493X

Document Type
Journal

Language
English

Abstract

Traces of the genesis of the [M - H]⁺ ion in flavanone and 2-hydroxychalcone, performed with the aid of metastable decomps. and deuterium labeling, allow new structural notations to be postulated for the [M - H]⁺ ions, which in turn provide evidence for the pathways in the [M - H - ketone]⁺ fragmentation routes for these compds.

Hit Structure

CAS Registry Number
223-93-8 CAPLUS
Chemical or Trade Name
6H-Dibenz[a,d]pyran (CA INDEX NAME)



L5 ANSWER 28 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
1991607804 CAPLUS [Full-text](#)

Document Number
118307804

Title
Mechanism of photoisomerization of xanthene to 6H-dibenz[a,d]pyran in aqueous solution

Author/Inventor

Huang, C. G.; Shukla, Deepak; Wan, Peter

Patent Assignee/Corporate Source
Dep. Chem., Univ. Victoria, Victoria, BC, V8W 3P8, Can.

Source
Journal of Organic Chemistry (1991), 56(18), 5437-42 CODEN JOCEAH, ISSN 0022-3263

Document Type
Journal

Language
English

Abstract

The photoisomerization of xanthene (I) to 6H-dibenz[a,d]pyran (II) is reported and a reaction mechanism proposed that involves initial A-C bond homolysis from the singlet excited state. The reaction was most efficient in aqueous solution and appears to be general for xanthene derivatives as exemplified by photolysis of 6-methylxanthene.

Hit Structure

CAS Registry Number
223-93-8 CAPLUS
Chemical or Trade Name
6H-Dibenz[a,d]pyran (CA INDEX NAME)



L5 ANSWER 27 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
1991580256 CAPLUS [Full-text](#)

Document Number
118108256

Title
Photocyclization of 2-(2'-hydroxyphenyl)benzyl alcohol and derivatives via o-quinonemethide type intermediates

Author/Inventor

Huang, C. G.; Beversidge, Kathryn Anne; Wan, Peter

Patent Assignee/Corporate Source
Dep. Chem., Univ. Victoria, Victoria, BC, V8W 3P8, Can.

Source
Journal of the American Chemical Society (1991), 113(26), 7678-84 CODEN JACSAT, ISSN 0002-7863

Document Type
Journal

Language
English

Abstract

A new photochem. reaction, the photocyclization of 2-(2'-hydroxyphenyl)benzyl alcohol (I) and derivs. to 6H-dibenz[a,d]pyran, is reported. The quantum yield for cyclization of I to give pyran (II) is 0.50 ± 0.04 in aqueous solns. of pH > 10. At lower pH, Φ is significantly lower. For example at pH 7, Φ = 0.25 ± 0.03. Results from investigations of structure-reactivity, pH effects, and fluorescence data suggest a mechanism in which the primary step involves oxidation of the phenol moiety to phenolate in S1, which is probably followed by (or is concerted with) bending of the Ph ring to give a more planar species in the excited state. This is subsequently followed by (or is concerted with) a dehydroxylation step of the benzyl alcohol moiety (all on the S1 surface) to give an o-quinonemethide type intermediate (III) and deoxygenation back to the ground-state surface. Electrocyclic ring closure of this intermediate gives the observed pyran. Nucleophilic trapping of this electrophilic intermediate by solvent (e.g., MeOH) to give the Me ether is also observed when photolysis is carried out in MeOH. The proposed reaction pathway is unprecedented; it takes advantage of the tendency of (phenyl) systems to be planar in the excited state as well as the enhanced electron-donating effect of the phenolate anion, which is required for the dehydroxylation step.

Hit Structure

CAS Registry Number
229-95-9 CAPLUS

Chemical or Trade Name
6H-Dibenz[a,b]pyran (CA INDEX NAME)



LB ANSWER 28 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
1991-09-092 CAPLUS Fulltext
Document Number
118-91492

Title
Photochemistry of phenylbenzyl alcohols in aqueous solution: photolysis vs. photorearrangement to 6H-dibenz[a,b]pyran

Author/Inventor
Huang, C. G., Wan, Peter
Patent Assignee/Corporate Source
Dep. Chem., Univ. Victoria, Victoria, BC, V8W 3P6, Can.

Source
Journal of Organic Chemistry (1991), 56(16), 4844-53 CODEN JOCEAH, ISSN 0022-3265

Document Type
Journal

Language
English

Abstract

The photochem. of phenylbenzyl alcs. PhOC6H4CH2OH (I), -CHMeCH2OH (II), and -CH2OH (III) has been studied in MeOH, CH3CN, and in aqueous solution. It was found that I and II gave the corresponding 6H-dibenzopyrans IV (R = H, Me, resp.) via a mechanism believed to involve initial aryl C-O bond homolysis followed by rearrangement to give a 2-(2'-hydroxyphenylbenzyl) alc. (phenyl) derivative, which subsequently undergoes a photocyclization reaction to the corresponding IV. The quantum yield for formation of IV (R = H) from I was 0.0079 in neutral 6:4 H2O:CH3CN. Lower quantum yields for formation of IV were observed on photolysis in pure organic solvents ($\phi = 0.015$ in 100% CH3CN). III did not give any reaction via a similar photocyclization process. Its photochem. involves initial aryl C-O bond homolysis followed by simple radical recombining to give isomeric hydroxybenzyls, as well as products derived from radical escape. In aqueous sulfuric acid solution (pH < 2), a competing acid-catalyzed photolysis reaction was observed for all of these comds. (i.e., C-OH bond heterolysis with assistance of hydronium ion); it was the only observed reaction in moderately concentrated sulfuric acid solution.

Hi Structure

CAS Registry Number
229-95-9 CAPLUS

Chemical or Trade Name
6H-Dibenz[a,b]pyran (CA INDEX NAME)



L5 ANSWER 29 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number 1992 131928 CAPLUS [Fulltext](#)

Document Number 113 131928

Title

Model synthetic studies for the construction of 5H-phenanthro[4,5-b]pyran and -pyrone systems

Author/Inventor

Majumder, P. L.; Sarkar, A. K.

Patent Assignee/Corporate Source

Dep. Chem., Univ. Cal. SG., Calcutta, 700 005, India

Source

Journal of the Indian Chemical Society (1989), 66(8), 673-80 CODEN: JICSAH; ISSN: 0019-4522

Document Type

Journal

Language

English

Abstract

The preparation of the 5H-phenanthro[4,5-b]pyran and -pyrone systems e.g. I (R, R¹ = H, R¹ = O) via the cyclization of 5,2-MeO(2CH₂OMe)C(6H₃)CH₂CH₂CH₂OH(2) to dibenzo[*b*]pyran II and starting from 3,4-HO(MeO)C(6H₃)CH₂OH and 2-OH(6H₃)CH₂CH₂OH is reported.

Hit Structure

CAS Registry Number

229-91-8 CAPLUS

Chemical or Trade Name

6H-Dibenzos[*b*,*d*]pyran (CA INDEX NAME)



L5 ANSWER 30 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number 1989 212550 CAPLUS [Fulltext](#)

Document Number 112 212550

Title

Photocyclization of o-phenoxybenzyl alcohols in aqueous solution. A simple synthesis of 6H-dibenzo[*b*,*d*]pyrans

Author/Inventor

Wan, Peter; Huang, Cai Gu

Patent Assignee/Corporate Source

Dep. Chem., Univ. Victoria, Victoria, BC, V8W 2Y2, Can

Source

Journal of the Chemical Society, Chemical Communications (1988), (17), 1193-5 CODEN: JCCCAT; ISSN: 0022-4936

Document Type

Journal

Language

English

Abstract

A new photochem. cyclization of o-phenoxybenzyl alcohols in aqueous solution gave rise to 6H-dibenzo[*b*,*d*]pyran (I) in good yield

Hit Structure

CAS Registry Number

229-91-8 CAPLUS

Chemical or Trade Name

6H-Dibenzos[*b*,*d*]pyran (CA INDEX NAME)



L5 ANSWER 31 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number 1989 45557 CAPLUS [Fulltext](#)

Document Number 102 45557

Title

Palladium-catalyzed cyclization of 2-substituted halogenoarenes by dehydrohalogenation

Author/Inventor

Ames, D. E.; Otsuka, A.

Patent Assignee/Corporate Source

Chem. Dep. Cheseb. Co., London, SW3 6LX, UK

Source

Tetrahedron (1984), 40(10), 1919-23 CODEN: TETRAH; ISSN: 0040-4020

Document Type

Journal

Language

English

Abstract

Cyclodehydrohalogenation mediated by Pd catalysts and solvents with different bases (the most satisfactory system being Ph₃COAc in Ac₂Me₂ with Na₂CO₃ as base) has been examined as a route to some heterocyclic systems. Whereas dehydrohalogenative cyclization processes require stoichiometric acids, of P(III) reagent, the present procedure involves only catalytic acids, (0.1M proportion, or less), of Pd compound. The preparation of dibenzofuran, carbazole, fluorenone, phenanthrene, 6H-dibenzo[*a*,*d*] [1,2]thiazine 3,5-decide (I), 6H-dibenzo[*b*,*d*]pyran and benzothian[*a*,*c*] 3-pyridine derivs. is described. The cyclization of 3-benzamide-2-chloropyridine (II) to 6-hydroxybenzo[*a*,*d*] [1,2]naphthyridine (III) illustrates the regioselectivity of the process.

Hit Structure

CAS Registry Number

229-91-8 CAPLUS

Chemical or Trade Name
6H-Dibenz[a,b]pyren- (CA INDEX NAME)



L5 ANSWER 30 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
1984-62349 CAPLUS Fulltext

Document Number
101-82349

Title
Hypolipidemic activity of some derivatives of 6H-dibenz[a,b]pyren

Author/Inventor
Benzetti, C.; Benetti, U.; Lovisolo, P. P.; Melloni, P.; Orsini, G.; Salvadori, P.

Patent Assignee/Corporate Source
Farmila Carlo Erba, Milan, 20159, Italy

Source
Arzneimittel-Forschung (1984), 34(8), 884-9 CODEN ARZMAD, ISSN 0004-4172

Document Type
Journal

Language
English

Abstract

Twenty-four title compounds (R = H or Cl; R1 = H, Me, Et, Ph; CHOH, R2 = OH, CH, COCH3; R3 = H, Et; heterocycloalkyl, n = 0-2) were prepared and tested for hypolipidemic activity. These compounds are among the most rigid structures related to doxorubicin ever synthesized, which means they have very few possible conformations of relative stability compared with the many for doxorubicin. 6H-Dibenz[a,b]pyren-6-carboxylic acid (85359-43-7) showed very high hypolipidemic activity, being 12 times more potent than doxorubicin in reducing plasma cholesterol concentration in the hypercholesterolemic rat and 11 times more potent in reducing plasma triglyceride concentration in the normal/penic rat.

HR Structure

CAS Registry Number
229-95-8 CAPLUS

Chemical or Trade Name
6H-Dibenz[a,b]pyren- (CA INDEX NAME)



Title Derivatives of 6-substituted 6H-dibenzo[b,d]pyran used as an antitumor, immunomodulating and antiviral medicine

Author/Inventor Maffei, Piero, Salvadori, Paolo, Leviolo, Pier Paolo

Patent Assignee/Corporate Source Farmatila Carlo Erba S.p.A., Italy

Source FI Demande, 85 pp. CODEN: FRXXBL

Document Type Patent

Language French

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2492378	A1	1982-04-23	FR 1981-19485	1981-10-20
FR 2492378	B1	1985-06-28		
US 4483001	A	1984-07-31	US 1981-307397	1981-10-01
IL 84008	A	1986-07-31	IL 1981-64008	1981-10-06
AU 8178181	A	1982-09-09	AU 1981-78181	1981-10-06
AU 842121	B2	1985-02-07		
ZA 8107002	A	1982-09-29	ZA 1981-7002	1981-10-09
FI 8103144	A	1982-04-21	FI 1981-3144	1981-10-12
FI 84824	B	1991-10-15		
FI 84824	C	1992-02-27		
GB 2091721	A	1982-08-04	GB 1981-31290	1981-10-16
GB 2091721	B	1984-02-15		
DE 3141387	A1	1982-08-12	DE 1981-3141387	1981-10-17
DE 3141387	C2	1991-05-02		
BE 890773	A1	1982-04-19	BE 1981-206273	1981-10-19
DK 8104613	A	1982-04-21	DK 1981-4613	1981-10-19
DK 154874	B	1989-01-16		
DK 154874	C	1989-08-12		
SE 8106167	A	1982-06-02	SE 1981-6167	1981-10-19
SE 432009	B	1987-11-09		
SE 432009	C	1988-02-18		
JP 57095861	A	1982-06-15	JP 1981-165894	1981-10-19
JP 01057114	B	1989-12-04		
CH 651302	A8	1985-08-13	CH 1981-6665	1981-10-19
SU 1318163	A3	1987-06-15	SU 1981-3346602	1981-10-19
CA 1238703	A1	1988-04-26	CA 1981-388273	1981-10-19
NL 8104749	A	1982-05-17	NL 1981-4749	1981-10-20
NL 191582	B	1995-05-16		
NL 191582	C	1995-09-19		
AT 8104487	A	1983-08-15	AT 1981-4487	1981-10-20
AT 380245	B	1986-04-25		

Abstract

Dibenzopyrans [R = H, alkyl, hydroxyalkyl, alkoxyalkyl, n = 0-3; R1 = H, OH, NH2, R2 = cyano, COOH, esterified COOH, (aralkylsubstituted amino or carbonyl) heterocaryl, R3, R4, R5, R6, R7, and R8 (same or different) are H, halo, haloalkyl, aralkyl, vinyl, VNE, NO2, (aralkylsubstituted ureido, OR, alkyl, alkoxy) were prepared, and they exhibited antitumor, antischistosome, and antischistosome activity (formulations are given) (n = 0, R2 = OH, R3 = R4 = R5 = R6 = R7 = R8 = H) was treated with DCC and KOH to give (n = 0, R2 = cyano, R3 = R4 = R5 = R6 = R7 = R8 = H)

HN Structure

CAS Registry Number 3542-47-9 DABPUS

Chemical or Trade Name Dibenzo[b,d]pyrylium, perchlorate (7CI, 8CI, 9CI) (CA INDEX NAME)

OR

1

OR 14797-73-0

OR C1 O4



CN
2
CEN 229-97-0
CMT C13 B9 0



L5 ANSWER 34 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
198234311 CAPLUS [Fulltext](#)

Document Number
9534811

Title
Mechanisms of formation of [B-HCO]⁺ and [B-GHCO]⁺ ions from isomers of 1,4-benzodioxin derivatives

Author/Inventor
Bouchour, Guy, Diegaut, Jacques

Patent Assignee/Corporate Source
Lab. Synth. Org., Ec. Polytech., Palaiseau, 91128, Fr.

Source
Organic Mass Spectrometry (1981), 16(6), 248-8 CODEN: OMAEDG; ISSN: 0030-493X

Document Type
Journal

Language
English

Abstract
The benzodioxin derives 1 and 8 (R = H, Ph) interconvert prior to fragmentation at low internal energy. The mechanisms of the 2 major fragmentations (HCO and PhCO loss) were studied by kinetic energy-release determination and appearance-energy measurements. The fragment ions have a dibenzopyran structure.

Hit Structure

CAS Registry Number
229-95-8 CAPLUS
Chemical or Trade Name
6H-Dibenzo[b,d]pyran (CA INDEX NAME)



L5 ANSWER 35 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
1981550814 CAPLUS [Fulltext](#)

Document Number
95150814

Title
The Pecher cyclization of aromatic amines with tert-butyl thionate in nonaqueous media

Author/Inventor
Oka, Shigeru, Iida, Kazuyuki, Shinhama, Kazuo, Takata, Toshiaki

Patent Assignee/Corporate Source
Dep. Chem., Univ. Tsukuba, Ibaraki, 305, Japan

Source
Bulletin of the Chemical Society of Japan (1981), 54(6), 2974-6 CODEN: BCSJAB; ISSN: 0009-2673

Document Type
Journal

Language
English

Abstract
The Pecher cyclization of various arylamines e.g. p-HNC₆H₄OPh, with Me₃CNO₂ under nonaq. conditions gave the corresponding cyclic products, e.g. 1, in moderate yields. The same reaction also proceeded readily with p-MeC₆H₄SO₂NO₂ at room temperature. Treatment of o-aminophenyl allyl ether or sulfide with Me₃CNO₂ gave intramol. Meerwein arylation to the olefinic bond affording 3-difluorocyclohexa-1,4-diene or -thiochromen, though the yield was low. The plausible mechanism of the Pecher cyclization with Me₃CNO₂ is discussed.

Hit Structure

CAS Registry Number
229-95-8 CAPLUS
Chemical or Trade Name
6H-Dibenzo[b,d]pyran (CA INDEX NAME)



L5 ANSWER 36 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
1977342135 CAPLUS [Fulltext](#)

Document Number
87142135

Title
Thermochemistry of some six-membered cyclic and polycyclic compounds related to coal

Author/Inventor

Shaw, Robert; Golden, David M.; Benson, Sidney W.
Patent Assignee/Corporate Source
Sunnyvale, CA, USA

Source
Journal of Physical Chemistry (1977), 81(18), 1716-29 CODEN JPCDHX, ISSN 0022-3654

Document Type
Journal

Language
English

Abstract

Values are presented for thermochem. properties [$\Delta H_f^\circ(298\text{K})$, $\Delta G_f^\circ(298\text{K})$, $\Delta G^\circ(300\text{K})$] of some 6-membered cyclic and polycyclic compds. Classes of compds. included are (a) aromatic hydrocarbons containing from 1 to 4 rings, (b) hydrazom hydrocarbons obtained by adding 1, 2, and 3 (and 4) mol of HD to the aromatic hydrocarbons, and (c) oxygenated hydrocarbons obtained by substituting O for CH₂ in some of the hydrazom hydrocarbons. Many of the values have been estimated by application of group-additivity and structural considerations.

HM Structure

CAS Registry Number
229-95-0 CASLHS

Chemical or Trade Name
6H-Dibenz[a,h]pyrene (CA INDEX 30061)



L5 ANSWER 37 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
1977170601 CAPLUS [Full Text](#)

Document Number
86170601

Title
Determination of the energy of highest occupied molecular orbitals of heterocyclic compounds using spectral data

Author/Inventor
Nachajev, E. A.
Patent Assignee/Corporate Source
Inst. Merzostred., Yekaterinburg, USSR

Source
Zhurnal Fizicheskoi Khimii (1977), 51(1), 30-4 CODEN ZFKH99, ISSN 0044-4937

Document Type
Journal

Language
Russian

Abstract
Literature data were used to obtain a relation between the charge-transfer energy of donor-acceptor complexes and the energy (E) of the highest occupied MO of the donor. This relation was then used to calculate E for 91 compounds. A linear relation between the ionization potential (I) and E was also found: $I = 9.96 + 3.45 E$.

Hit Structure

CAS Registry Number
229-91-8 CAPLUS
Chemical or Trade Name
6H-Gibeno[h,d]pyran (CA INDEX NAME)



L5 ANSWER 38 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
1976130124 CAPLUS [Full Text](#)

Document Number
84130124

Title
Drugs derived from carbazolidine. 2. Basic esters of nitrogen and carboxylic analogs

Author/Inventor
Rastvor, Raj K., Ziko Tarras, B., Pars, Harry G., Plehnke, Nicholas P., Dodge, Patrick W., Dean, Anthony T., Kynel, Jaroslav, Somani, Peter
Patent Assignee/Corporate Source
Shapiro Assoc., Cambridge, MA, USA

Source
Journal of Medicinal Chemistry (1976), 19(4), 454-61 CODEN JMCMAR, ISSN: 0022-2625

Document Type
Journal

Language
English

Abstract
Of 25 basic esters of nitrogen and carboxylic carbazolidine analogs pharmacological tested in mice, rats, dogs, and cats, I [61637-66-3] was more potent than codeine phosphate [50-05-0] in the writhing, hot-plate, and tail flick tests, and II [86019-65-1] was very potent in the mouse audiogenic seizure test and was active in various anticonvulsant tests. Structure-activity relations were discussed.

Hit Structure

CAS Registry Number
229-91-8 CAPLUS
Chemical or Trade Name
6H-Gibeno[h,d]pyran (CA INDEX NAME)



L5 ANSWER 39 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
1979486601 CAPLUS [Full Text](#)

Document Number
63486601

Title
6H-Gibeno[h,d]pyrans. I. Synthesis

Author/Inventor
Devlin, John P.
Patent Assignee/Corporate Source
Pharmacia Res. Canada Ltd., Pointe Claire, QC, Can.

Source
Canadian Journal of Chemistry (1979), 57(9), 343-9 CODEN CJCHAG, ISSN: 0008-4042

Document Type
Journal

Language
English

Abstract
2,4-Dihydroxy- and 2,6-dihydroxybiphenyl-2-carboxylic acid isosteres, e.g. (X = O), were prepared from o-BzOHCOOH and dihydroxybenzenes. Grignard addition to or direct BF₃·Et₂O-NaBH₄ reduction of these isosteres yields resp. 6,6-substituted, e.g. (X = Me₂), or the 6,6-unsubstituted, e.g. (X = H), 6H-Gibeno[h,d]pyrans.

Hit Structure

CAS Registry Number
229-91-8 CAPLUS
Chemical or Trade Name

68-Dibenzob[a,d]pyran (CA INDEX NAME)



L3 ANSWER 40 OF 55 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number

1574132451 CAPLUS P-6303

Document Number

80132451

Title

Rearrangements of organometallic compounds. X Mechanism of 1,2-aryl migration in the Wittig rearrangement of α -metalated benzyl aryl ethers

Author/Inventor

Baich, John J.; Kovacs, Csaba A.; Rhee, Sue-Geo

Patent Assignee/Corporate Source

Dep. Chem., Cathol. Univ. America, Washington, DC, USA

Source

Journal of Organometallic Chemistry (1974), 65(3), 289-301 CODEN JORCAL ISBN 0022-028X

Document Type

Journal

Language

English

Abstract

The mechanism of 1,2-aryl shifts in the Wittig rearrangement of α -metalated benzyl aryl ethers was investigated by the examination of the following ethers: PhOCH_2Ph , p - and m -Me $_2\text{C}_6\text{H}_4\text{OCH}_2\text{Ph}$, 2,4-Bz(Me_2C) $_2\text{OCH}_2\text{Ph}$, and dibenzob[a,d]pyran. The failure to trap any alkoxide intermediate, the ease of rearrangement for the pyran, the lack of evidence for an aryl intermediate with the benzyl butyl ethers indicated that an intramolecular pathway, in which radical pairs were generated and then collapsed to the isomeric carbonyls, was followed.

HR Structure

CAS Registry Number

229-95-8 CAPLUS

Chemical or Trade Name

68-Dibenzob[a,d]pyran (CA INDEX NAME)



L5 ANSWER 41 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
1973-69749 CAPLUS [Full-text](#)
Document Number
78 69749

Title
Fluorescent hapten-protein conjugates

Author/Inventor
Gross, Stanley Joseph

Source
Ger Offen, 107 pp CODEN GWXRBX

Document Type
Patent

Language
German

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2128517	A	19720629	DE 1971-2128517	19710668
GB 1364928	A	19740829	GB 1974-7824	19710664
FR 2113821	A3	19720630	FR 1971-2113821	19710611
NL 7115795	A	19720518	NL 1971-15795	19711116
SE 7410067	A	19740805	SE 1974-10067	19740805
CA 1022923	A2	19771220	CA 1975-239611	19751427

Abstract

Procedures and intermediates for the preparation of outstanding antigens are described in addition to fluorescent hapten and antigen derivs. which are useful in fluorescent derivs. The antigens are useful in the formation of antibodies which are absolutely specific for the metabolite products corresponding to the hapten moiety of the new conjugate and are able in 10-20 µg units to detect and characterize steroids, catechol amines, or peptides in body or cell fluids. The steroid-protein antigens (I) are prepared by conversion of the acetoxy of a steroid with an unsatd. A ring to the carbodimide, and conjugation with a suitable protein such as bovine serum albumin, keyhole limpet hemocyanin (KLH), or human γ-globulin, as in the preparation of 6-(17)-estradiol-4-oxo-benzoyl-KLH. Other haptens or intact protein antigens can be obtained in the reaction sequence provided that the hapten moiety contains an unsatd. >C=C< or ring as in catechol amines, or a compound containing the hydrazide, lysine, or tryptophan structures. I form in the living blood stream antibodies which are immuno- specific for the derivative used in the production of the antigen and which are characterized by the following reactions: double diffusion in agar or immuno-electrophoresis, quant. precipitin expts., hapten inhibition, and fluorescence quenching and fluorescence intensification of hydrazide and amino derivs. prepared by mild reduction of the corresponding ace compds.

HI Structure

CAS Registry Number
229-95-8 CAPLUS

Chemical or Trade Name
6B-Dibenzos(b,d)pyran (CA INDEX NAME)



L5 ANSWER 42 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
1972-59377 CAPLUS [Full-text](#)
Document Number
76 59377

Title
Persulfate oxidation of carboxylic acids IV Oxidation of (o-arylphenoxy)acetic acids

Author/Inventor
Dewar, P. G., Forrester, A. R., Thomson, R. H.

Patent Assignee/Corporate Source
Dep. Chem., Univ. Aberdeen, Aberdeen, UK

Source
Journal of the Chemical Society [Section] C: Organic (1971), (23), 3980-4 CODEN JC00AX, ISSN 0022-4852

Document Type
Journal

Language
English

Abstract

Oxidation of o-PhC(=O)OC(=O)H (e.g. RuH, Me) with K2S2O8 gave o-PhC(=O)OC(=O)R radicals which oxidized at C-2' to 6,6-dialkyl-6H-dibenzos(b,d)pyran and dimers compds., e.g. 6,6-tet. 4,9'-tetrahydro-9,9'-dihydro-6,6'-dibenzos(b,d)pyran (II). Pyrolysis of II gave 6H-dibenzos(b,d)pyran, o-PhC(=O)OC(=O)R, and 9,9'-dihydro-6,6'-dibenzos(b,d)pyran. Oxidation of dibenzos(b,d)pyran with 2,3-dichloro-6,6'-dicyanobenzonitrile gave benzocoumarin and di(6H-dibenzos(b,d)pyran-6-yl) ether. Oxidation of [o-(1-naphthyl)phenoxy]acetic acids gave spiro dimers and a low yield of pyran. ArC(=O)OC(=O)R cations produced in oxidation of I in the presence of excess Cu(II) ions did not cyclize but underwent radical cleavage to phenols. Oxidation of 6,6'-diphenylindene (fluorene) acid resulted in di(6H-dibenzos(b,d)pyran-6-yl) ether, the main product being a dimer of spirobenzocoumarin-9,9'-dihydro-6,6'-dibenzos(b,d)pyran (II) formed by cyclization at C-1'. When heated the dimer equilibrated with III and 3 other isomeric dimers. III was trapped by Diels-Alder addition with maleic anhydride but not with tetracyanoethylene which gave rearrangement to 5,6'-methylenebis(phenyl).

HI Structure

CAS Registry Number
229-95-8 CAPLUS

Chemical or Trade Name
6B-Dibenzos(b,d)pyran (CA INDEX NAME)



L5 ANSWER 43 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
1970-46574 CAPLUS [Full-text](#)
Document Number
73 65754

Title New reactions with persulfate: oxidation of o-phenylphenylacetic acids
Author/Inventor

Dewar, P. G., Forrester, Alexander R., Thomson, Ronald H.

Patent Assignee/Corporate Source
Dep. Chem., Univ. Aberdeen, Old Aberdeen, UK

Source Journal of the Chemical Society [Section] D: Chemical Communications (1979), (14), 850 CODEN: CCJDAO, ISSN: 0577-6171

Document Type
Journal

Language
English

Abstract
ES065: oxidation of o-phenylphenylacetic acid to the o-phenylphenoxymethyl radicals cyclized it intramol. to give cyclohexadienyl radicals which were either oxidized to dibenzopyran and a related bis-oxal or dimerized.

HR Structure

CAS Registry Number
229-95-9 CAPLUS

Chemical, or Trade Name
6,8-Dibenzos[1,4]pyrylium (CA INDEX NAME)



L5 ANSWER 44 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
1989 35955 CAPLUS Fulltext

Document Number
70 35955

Title Pariser-Parr-Pople calculations and comparison of electronic spectra of iso- π -electronic oxygen, nitrogen, sulfur, and selenium heterocycles
Author/Inventor

Fabian, Juergen, Mehhorn, Adam, Zahradnik, Rudolf

Patent Assignee/Corporate Source
Tech. Univ. Dresden, Dresden, Fed. Rep. Ger.

Source Theoretica Chimica Acta (1968), 12(3), 247-55 CODEN: TCHAAH, ISSN: 0040-5744

Document Type
Journal

Language
German

Abstract
Heterocyclic compounds (42) formally derived from allenene or nonalternant hydrocarbons by replacing a C-C group by an O, N, S, or Se atom, are studied by the Pariser-Parr-Pople-type of calculation. By means of these results the new π and visible spectra are described. The O and the Se atoms are treated in the LCAO-MO method by using the p-model. In most cases spectral features are not only well reproduced, but interpretations of the spectra of iso- π -electronic compounds, possessing analogous structures, are interpreted, too. On calculating cationic N heterocycles by using parameters of pyrrole N results are unsatisfactory.

HR Structure

CAS Registry Number
229-95-9 CAPLUS

Chemical, or Trade Name
Dibenzos[1,4]pyrylium (BCT, SC1) (CA INDEX NAME)



L5 ANSWER 46 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
1969 3740 CAPLUS [Fulltext](#)
Document Number
70 3740

Title
Two preparations of spirodibenzopyran

Author/Inventor
Chenault, Jacques; Rollin, Patrick; Seltou, Ralph

Patent Assignee/Corporate Source
Lab Chim IV, Fac Sci, Orleans-La Source, Fr

Source
Comptes Rendus des Seances de l'Academie des Sciences, Serie C: Sciences Chimiques (1968), 267(19), 405-7 CODEN: CRDCAQ ISSN: 0567-6541
Document Type
Journal

Language
French

Abstract

6-Cyclohexanone-1,2,3,4,7,8,9,10-octahydrobenzo[b,d]pyran (I), which is prepared by the dehydration of cyclohexanone imine, is heated with S at 220° to give spirocyclohexane-6-dibenzo[b,d]pyran (II). Cyclohexanone is treated with the Grignard prepared from o-o-MnOCC6H4Br and the product is dehydrated to give III. III is heated with HI to give II.
HI Structure

CAS Registry Number
229-97-0 CAPLUS
Chemical or Trade Name
6H-Dibenzospiro[5.5]undec-10-ene (CA INDEX NAME)



L5 ANSWER 46 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
1965 471814 CAPLUS [Fulltext](#)
Document Number
65 71814

Title
Heteroaromatic cations. IV. Hydrolysis of chromylum, thsachromylum, and selenachromylum perchlorates

Author/Inventor
Degani, Jacopo; Fochi, Rita; Spunta, Giuseppe

Patent Assignee/Corporate Source
Univ. Bologna, Italy

Source
Bollettino Scientifico della Facolta di Chimica Industriale di Bologna (1965), 23(2-3), 151-64 CODEN: BSFCAV; ISSN: 0366-3205
Document Type
Journal

Language
Italian

Abstract

of CA 63, 6137e Study of the hydrolysis of chromylum, thsachromylum, and selenachromylum perchlorates at various pHs suggests that o-pseudo bases (I, X = O, S, Se) are formed first followed by II or III depending on the medium. I (X = O, S) are converted to III in aq. aq. and are oxidized with MnO2 to the cation or freebase. The product obtained by hydrolysis of I (X = Se) in 0.001N H2SO4 oxidized with MnO2 in CHCl3 gives 2-benzoselenophenecarboxaldehyde (IV). UV spectra are given for the various intermediates. Chromylum perchlorate (5 g.) in CHCl3 and 20 cc. 0.1N H2SO4 was stirred for a few minutes, extracted with Et2O, dried, concentrated, and crystallized from ligroine to give I (X = O), m. 198-6°. II (X = S) was prepared similarly in 0.1N H2SO4, m. 156-6° (ligroine). Selenachromylum perchlorate (10 g.) in 100 cc. of 0.001N H2SO4 stirred a few minutes, extracted with Et2O, dried, concentrated, dissolved in CHCl3 and refluxed with 15 g. MnO2 gave IV, m. 79-8° (ligroine).
HI Structure

CAS Registry Number
3561-47-0 CAPLUS
Chemical or Trade Name
Dibenzospiro[5.5]undec-10-ene perchlorate (7CI, 8CI, 9CI) (CA INDEX NAME)
CN
1
CPI: 1479-73-0
CMT: C1 04



CN
2
CPI: 229-97-0
CMT: C13 03 0



L5 ANSWER 47 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number

[illegible][illegible]

PhIQ2, 214'; 80, none; IV, XI, p-MeOC6H4, 4, PhIQ2, 278'; 90, none; IV, XI, o-MeOC6H4, 12, C6H6, 198'; 40, none; V, XI, Ph, 5, PhOEI, 288'; 82, none; VI, XI, o-MeOC6H4, 6, PhOEI, 294-5'; 60, orange (turns yellow and acquires green fluorescence); IV, XI, Ph, 3, ClC6H3, 264'; 90, pale yellow; IV, XI, p-MeOC6H4, 6, dioxane, 296'; 95, brown; VI, XI, Ph, 4, ClC6H3, 330'; 53, yellow. The adducts obtained by these Diels-Alder syntheses are practically colorless and are insol. in alkali.

IR Structure

CAS Registry Number
223-91-9 CAPUS

Chemical or Trade Name
6a-Dibenzo(b,d)pyrene (CA INDEX NAME)



15 ANSWER 49 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number

1956 12392 CAPLUS Full-text

Document Number

50 12392

Title

4-Glyoxycoumarins and 2,3-dimethylquinoxalins in dimer syntheses

Author/Inventor

Musella, Ahmed, Kamel, Mohamed

Patent Assignee/Corporate Source

Cairo Univ., Egypt

Source

Journal of the American Chemical Society (1955), 77, 1823-31 CODEN JACSAT, ISSN: 0002-7063

Document Type

Journal

Language

Unavailable

Abstract

Derive of 6H-dibenz(b,d)pyran (I), 5(6H)-quacrylene (II) and hexahydrophenazine (III or IV) may be obtained from 4-styrylcoumarins (V) and 2,3-dimethylquinoxaline (VI) in the Dele-Alder reactions. An improved method for the preparation of the V, in satisfactory yields, is described. The appropriate coumarin-4-carboxylic acid (0.02 mol) and 0.03 mol aldehyde in 30 cc. dry pyridine treated with 10 drops pyridine, the mixture heated gradually at 120-130° (both temperatures, kept 6 h at this temperature, cooled, diluted with H₂O in beginning turbidly, refrigerated 0.5 h, and filtered, and the filter residue washed with about 50 cc. cold EtOH and dry yield from a suitable solvent gave the corresponding 4-(1-substituted styryl)-2-methylcoumarins (substituent, m.p., % yield, and color with H₂SO₄/CH₂Cl₂): Ph (IX), 176°, 62, orange-red, p-MeOC₆H₄ (X), 212-13°, 65, orange-red, 4,3-HO/MeOC₆H₄ (XI), 212, 65, brown, 3,4-COOC₆H₄ (XII), 181-82, brown, all compounds were recrystallized from glacial AcOH except VII, they were in general soluble in CHCl₃, hot C₆H₆, and xylene, but were sparingly soluble in pet. ether; their yellow salts in CHCl₃ decolorized in CCl₄. The appropriate V (0.3 g) and 1 g maleic anhydride in 20 cc. dry xylene refluxed for a certain period of time, and the resulting crystalline colorless solid washed with about 20 cc. cold dry C₆H₆ and crystallized from a suitable solvent gave the corresponding reduced (derivative of II) of structure VIII (R, m.p., % yield, reaction time in hrs., and color with H₂SO₄/CH₂Cl₂): p-MeOC₆H₄, 248° (from xylene), 62, 3, none, p-MeOC₆H₄, 222° (from PhH₂O), 81, 3, none, and the 7,8-benzocoumarin analogs: Ph, 268° (from PhH₂O), 90, 5, yellow, p-MeOC₆H₄, 274° (from Ac₂O), 84, 2, yellow-green, 4,3-HO/MeOC₆H₄, 280° (from glacial Ac₂O), 71, 3, yellow, all products melted with decomposition: IX (0.66 g) in 54 cc. MeOH containing 1 g MeOH refluxed 15 min., filtered while hot, decomposed with ice-cold dilute HCl and filtered, and the deposit recrystallized after 1 h from EtOH gave 6,7,8,9-tetrahydro-2-(4,4-dimethyl-1H-5H-benzocyclopenta[1,2-b:4,5-b']quinoxaline-7,8-dicarboxylic acid (XIII), m. 266° (decomposition) (from EtOH), which was soluble in aqueous NaHCO₃. XIII (0.5 g) in 10 cc. Ac₂O refluxed 4 h gave VIII p-MeOC₆H₄ derivative of IX (0.3 g), 1 g maleic acid, and 30 cc. dry xylene refluxed 6 h and the resulting colorless crystals recrystallized from EtOH yielded about 90% XIII, m. 266° (decomposition). The appropriate V (0.5 g) and 0.8 g N-phenylmaleimide (or p-tolylmaleimide) in 20 cc. dry xylene refluxed for a certain period of time gave the corresponding XIV. In this manner were prepared the following XIV from 7-methyl-4-styrylcoumarin Series, (derivative of I) (R, R', m.p., % yield, reaction time in hrs., and color in H₂SO₄/CH₂Cl₂): p-MeOC₆H₄, Ph, 300° (from CHCl₃), 80, 3, none, p-MeOC₆H₄, Ph, 327° (from xylene), 62, 3, none, 4,3-HO/MeOC₆H₄, Ph, 272° (from PhH₂O), 62, 4, pale yellow, p-MeOC₆H₄, p-MeOC₆H₄, 270-1° (from dioxane), 81, 4, yellow, and the following 7-substituted-styrylcoumarin-derivatives of structures XIV: Ph, Ph, 360° (from xylene), 92, 5, yellow, p-MeOC₆H₄, Ph, 512° (from xylene), 89, 5, yellow, p-MeOC₆H₄, Ph, 318-19° (from PhH₂O), 93, 3, yellow, 4,3-HO/MeOC₆H₄, Ph, 298° (from xylene), 62, 4, green-yellow, Ph, p-MeOC₆H₄, 298° (from xylene), 84, 4, yellow-green, p-MeOC₆H₄, p-MeOC₆H₄, 304° (from xylene), 90, 3, pale yellow, p-MeOC₆H₄, p-MeOC₆H₄, 368° (from dioxane), 87, 3, yellow, 4,3-HO/MeOC₆H₄, p-MeOC₆H₄, 290° (from xylene), 62, 3, yellow, VI (0.5 g) and 0.5 g N-phenylmaleimide refluxed 5 h, the mixture allowed to stand overnight and evaporated, and the residue recrystallized from C₆H₆-pet. ether gave 0.12 g. III (or IV), m. 154°, it was easily soluble in C₆H₆ and xylene, sparingly soluble in pet. ether, and gave a yellow color with concentrated H₂SO₄.

Hit Structure

CAS Registry Number

229-55-9 CAPLUS

Chemical or Trade Name

6H-Dibenz(b,d)pyrene (CA INDEX NAME)



15 ANSWER 50 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number

1953 41675 CAPLUS Full-text

Document Number

47 41675

Title

Bacteriostatic action of several furan derivatives I Fungistatic action for fungi growing on tobacco leaves

Author/Inventor

Osaki, Yoji, Hattori, Satoriko

Patent Assignee/Corporate Source

Hokkaido Univ., Sapporo

Source

Nippon Nogei Kagaku Kaishi (1952), Volume Date 1951-1952, 25, 391-2 CODEN:NNOKAA, ISSN: 0002-1407

Document Type

Journal

Language

Unavailable

Abstract

Fungistatic activity of vapors of various organic compounds (alks., solids, aldehydes, esters, and others) was tested against fungi growing on tobacco leaves. Among these, AmOH, BzOH, valeraldehyde, vanillin, 2-ketvaldehyde (I), citronellal, and heliotropin showed relatively high activities, and I was the most effective.

Hit Structure

CAS Registry Number

229-55-9 CAPLUS

Chemical or Trade Name

6H-Dibenz(b,d)pyrene (CA INDEX NAME)



15 ANSWER 51 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number

1953 41674 CAPLUS Full-text

Document Number

47 41674

Title

Antibacterial activity of some organic compounds in vitro VI Antibacterial activity of diphenyl ethers and related compounds on Mycobacterium tuberculosis, Micrococcus pyogenes var. aureus, and Escherichia coli

Author/Inventor

Tomita, Masao, Watanabe, Wachi

Patent Assignee/Corporate Source

Univ. Kyoto

Adams, Roger
Document Type
Patent
Language
Unavailable
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2569386		19500530	US	

Abstract

Products having aromatic character are obtained by a 6-step synthesis consisting of: (1) treating a 3,5-dimethoxyphenyl alkyl ketone with an alkyl Grignard reagent; (2) distilling the resultant carbene with a few drops of H₂SO₄ to form the corresponding alkane; (3) reduction of the alkene to the alkane; (4) demethylation with HBr to the 3,5-dimethoxyphenylalkane; (5) condensation with an allyl 5-methylcyclohexan-1-one-2-carboxylate to the 1-hydroxy-3-allyl-5-methyl-7,8,10-tetrahydro-6-oxocyclopropane; and (6) conversion to the pyran with R₂SiCl₂. Thus, 3-(3,5-dimethoxyphenyl)-2-heptene (I) was prepared by slowly adding 28.5 g, 3,5-MeO-C₆H₃CO₂Me in 170 ml. EtO to 0 (0.05 mole Me₂Si), refluxing 1 hr., cooling the solution, decomposing with saturated NaHCO₃ solution, drying the EtO layer, distilling the carbene, heating the crude carbene to boiling under reduced pressure in a distilling flask with 5 drops 25% H₂SO₄, evaporating all the water in vacuo, and distilling the pure I, b.p. 5 149-59°; n_D25 1.5247; d₄25 0.864. Reduction of 18.55 g (1 in 100 ml. 95% EtOH) with Raney Ni at room temperature and 2-3 atmospheres and distillation gave the pure heptene (II), b.p. 135-75°; n_D25 1.4915; d₄25 0.864. 8 (7.6 g) was refluxed 5 hrs. in 18 ml. 40% HBr and 53 ml. glacial HOAc, poured into 400 g. ice water, extracted with 3 portions of EtO, the extracts neutralized with NaHCO₃ solution and extracted with 10% NaOH, the extracts acidified, and the EtO extracted repeated, removal of the EtO and distillation yielded the yellow 5-(1-methylhexyl)resorcinol (III), b.p. 185-70°; n_D25 1.441, 4.0 g. Et 6-methylcyclohexan-1-one-2-carboxylate, and 2.5 g. POCl₃ refluxed 5 hrs. in 30 ml. dry CH₂Cl₂, poured into 100 g. ice water, the mixture neutralized with NaHCO₃, and the CH₂Cl₂ evaporated yielded 1-hydroxy-5-(1-methylhexyl)-7,8,10-tetrahydro-6-oxocyclopropane (IV), m. 144.5-5° (from EtO). To 3.15 g. IV and 0.115 mole MeMgI in 60 ml. EtO was added 80 ml. dry CH₂Cl₂, the EtO distilled off, the CH₂Cl₂ solution refluxed 18 hrs., the Grignard compound decomposed with 120 g. ice and 15 ml. concentrated H₂SO₄, the aqueous layer extracted with EtO, the organic layers combined, the solvents evaporated, and the purple solid residue treated in 50 ml. 50% with 1 g. D₂O, and refluxed 10 hrs., distillation gave the 6H-6-oxocyclopropane analog (V) of IV, b.p. 205-12°; n_D25 1.5080 (3-methoxyphenyl)-2-heptene (VI), similarly prepared from the corresponding ketone, MeMgI, and H₂SO₄, b.p. 205 139-40°; n_D25 1.5301, was reduced to the hexane (VII), b.p. 5 128-9°; n_D25 1.5021, d₄25 0.9707. The final product was the 3-(1-methylpentyl) homolog of V, b.p. 173-81°.

Hit Structure

CAS Registry Number
229-55-8 CAPLUS
Chemical or Trade Name
6H-Dibenz[a,h]pyrene (CA INDEX NAME)



L5 ANSWER 56 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
19503092 CAPLUS [Fulltext](#)
Document Number
44 3092

Title
Tetrahydrodibenzopyran derivatives isomeric with tetrahydronaphthalene

Author(s)
Aitson, A W D, Morrison, A L, Parkes, M W

Source
Journal of the Chemical Society (1948) 892-5 CODEN JCSCAR ISSN 0368-1798

Document Type
Journal

Language
Unavailable

Abstract

4,1,3-C₆H₃3C₆H₃OH₂ (I) (22 g) and 22 g. Et 1-methyl-3-cyclohexanone-2-carboxylate (II), treated slowly with 40 ml. concentrated H₂SO₄ and kept 21 hr. at room temperature, gave 7-hydroxy-5-methyl-6-hexyl-3,4-cyclohexenecarbinol (III), cream, m. 167-8°; intense blue fluorescence in alc. KOH. III (1 g) and 0.5 g. 5% Pd-C, heated at 300-10° gave 1-hydroxy-9-methyl-6-hexyl-3,4-cyclohexenecarbinol (IV), m. 220-2°, 3,4-Bz-C₆H₄CO₂CH₂ (1.75 g) and 1.5 g. in 10 ml. NaOH, heated to boiling and treated with 0.5 mL. CuSO₄ also gave IV. III (10 g) in 150 mL. CH₂Cl₂, added to MeMgI (27.5 g. MeMg in 120 mL. ether and refluxed 15 hr., gave 2-hydroxy-2,3,6-trimethyl-5-hexyl-9,4,5,6-tetrahydrodibenzopyran (V), amber resin, b.p. 180-3°; 4,1,3-C₆H₃3C₆H₃OH₂ (1.45 g) and 0.2 g. II in 50 mL. CH₂Cl₂, boiled 5 hrs. and kept 10 hr. at room temperature, gave the 6-hexyl homolog (VI), m. 140-1°, 3-hexyl homolog (VII) of V, b.p. 185-200°; 6-Cyclohexenol (III, pale pet., m. 152-3°; 3'-octyl homolog (VIII) of V, b.p. 60-61°, 119-4°, 4-Cyclohexenecarbinol (m.p. 100-101° method of preparation given) and II with POCl₃ gave the 6-cyclohexenol analog (III, m. 280-3°; 3'-cyclohexenyl analog (VIII) of V, b.p. 60-61°; 185-90°; m-C₆H₄CO₂CH₂ (27.5 g) and 32 g. sec-C₆H₁₃CO₂CH in 100 ml. Ph₂CO, heated slowly at 70-40° with 66 g. AlCl₃ in 130 mL. Ph₂CO and heated 5 hr. at 80° gave 14,7,7'-4-sec-octylresorcinol (X) b.p. 114-137°, 25 g. C₆H₅CHO₂CH₂ (25 g) 2.4 g. 1,3-C₆H₄CO₂CH₂ and 1.2 g. NBrF₄ heated 3 hr. at 140° gave 15,7,7'-X. IX (12.9 g) and 5 in 80 mL. CH₂Cl₂, heated with 85 g. POCl₃, gave 4,4-g of the 6-sec-octyl analog of III, m. 197°; 3'-sec-octyl analog (X) of V, b.p. 50-61° 163°. The Gayler test gives ED50 (mg/kg) as follows: V 0.125, VI 0.04, VII 0.04, X 0.07, LD50 (mg/kg) for mice: V 480, VI 185, VII about 400, VIII 60, X about 400. Hairish activity as measured by the Gayler test, is present but there was pronounced change of potency with variation in the alkyl substituent then in the tetrahydrodibenzopyran series.

Hit Structure

CAS Registry Number
229-55-8 CAPLUS
Chemical or Trade Name
6H-Dibenz[a,h]pyrene (CA INDEX NAME)



LS ANSWER 57 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
1992-0091 CAPLUS [Full Text](#)
Document Number
44 3091

Title
Polymerization products of diketene

Author/Inventor
Chalk, Arthur B.; Speise, Albert B.; Dull, Malcolm F.

Source
Journal of Organic Chemistry (1948), 14, 460-9 COCEN JOCEAH, ISSN 0022-3263

Document Type
Journal

Language
Unavailable

Abstract

The addition of 800 g. diketene during 2 hrs. to 1 l. boiling C₆H₆ containing 1 g. NaOPh gives 54% dehydroacetic acid, 4% 2,6-dimethyl-4-pyrone, m. 131-2°. CO₂ (12 mol.-% based on diketene), Me₂CO, and 8% 2,6-bis(6-methyl-4-oxo-2-pyranylmethyl)pyrone (I), m. 235-6°, insol. in common organic solvents except boiling p-dioxane and H₂OAc, in which it dissolves to the extent of 7.2 and 5.2 g./100 g. solvent, resp. I (11 g.) and 150 g. Br at 2-4° 10 days give a red oil which loses HBr at ordinary temperature to give a yellow solid. Recryst. from Me₂CO gives 2.4 g. yellow needles, m. 92-3°, analysis corresponds to C₁₉H₁₄O₆.

HR Structure

CAS Registry Number
229-95-8 CAPLUS
Chemical or Trade Name
6B-Dibenzos(b,d)pyran (CA INDEX NAME)



LS ANSWER 58 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
1948-00831 CAPLUS [Full Text](#)
Document Number
40 20631

Title
Dibenzopyran derivative having marijuana activity

Author/Inventor
Adams, Roger

Document Type
Patent

Language
Unavailable

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 964827		19441016	GB 1942-4972	19420419

Abstract

Optically active pulegone is condensed with a 1,3,5-C₆H₃(OH)₃R (I), where R = an alkyl of 1 to 10 C atoms by refluxing the mixture in an inert solvent in the presence of POCl₃ in the approx. proportion of 1 mol. of POCl₃ to 3 mols. of pulegone. Thus, from optically active pulegone (α_D²⁰ 2.8°) and I, R = Me, was obtained 1-hydroxy-3,5,6,8-tetramethyl-7,9,10-tetrahydro-6-dibenzopyran (II), b.p. 170-65°, which is optically active, [α]_D²⁰ 12.9 to 90.4°, depending upon the b.p. of the fraction tested. From I, R = Bu, and pulegone a 3-Bu homolog of II, b.p. 58-145-55°, [α]_D²⁰ 72 to 90° (EtOH), may be obtained. Also prepared was the 3-hexyl homolog, b.p. 4-133-4°, [α]_D²⁰ 73.9°.

HR Structure

CAS Registry Number
229-95-8 CAPLUS
Chemical or Trade Name
6B-Dibenzos(b,d)pyran (CA INDEX NAME)



LS ANSWER 59 OF 59 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
1943-37522 CAPLUS [Full Text](#)
Document Number
37 37522

Title
Polyhydrodibenzopyran derivatives

Author/Inventor
Toosi, Alexander R.; Ghosh, Ranajit

Patent Assignee/Corporate Source
Roche Products Ltd

Document Type
Patent

Language
Unavailable

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 547669		19420807	GB 1941-1430	19410203

Abstract

The compds. are prepared by the condensation of resorcinol derivs., such as orcinol or olivitol, with unsatd. terpenoid compds. such as pulegol and pulegone.

HR Structure

CAS Registry Number

229-95-8 CARLUS

Chemical or Trade Name
68-Gibenzulb,djpyra- (CA INDEX NAME)



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L3 31 SEA FILE=REGISTRY SSS SAM L1
L4 5 SEA FILE=REGISTRY FAN FUL L1

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***** Welcome to STN International *****

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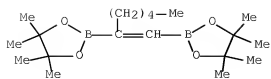
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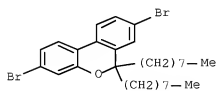
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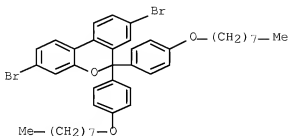
L3 2 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
Author/Inventor
68-Gibenzulb,djpyra- 3,8-dibromo-6,8-dioctyl-, polymer with 2,2'-(1-pentyl-1,2-ethenediyl)bis[4,4,5,5-tetramethyl-1,3,2-dioxaborolane]
HR Structure
CN



CH
2



L3 2 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
 Author Invented
 6,6'-Dibromo[3,3']pyran, 3,8-dibromo-6,6'-bis[4-(octyloxyphenyl)-] homopolymer (IC)
 Hit Structure
 CN
 1



PROPERTY DATA AVAILABLE IN THE "PROP" FORMAT
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L4 33 SEA SSS FULL L4

=> # 14
 L5 14 L4

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L5 14 ANSWERS CAPLUS COPYRIGHT 2009 ACS on STN
 Title Peroxide oxidation of carboxylic acids. III. Oxidation of α -unsaturated and biphenyl-2-carboxylic acids

L5 14 ANSWERS CAPLUS COPYRIGHT 2009 ACS on STN
 Title Polymeric light emitting materials for thin films, light emitting devices, plasma light sources, display devices, organic transistors and solar cells

=> # 14/prep
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 4773532 PREP/PL
 L6 33 14/PREP
 (L4 L5) PREP/PL)

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L6 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2009 ACS on STN
 Accession Number
 2008-422839 CAPLUS File(s)
 Document Number
 150 427186

Title Polyarylenes, their compositions and films, organic photoelectric converters and electroluminescent devices with their layers, and monomers for them

Author Invented
 Uemari, Yasunori; Noguchi, Kiminobu
 Patent Assignee Corporate Source
 Sumitomo Chemical Co., Ltd., Japan

Source Jpn. Kokai Tokkyo Koho, 51pp OODEN JAKKAI

Document Type

Patent

Language

Japanese

Parent Information

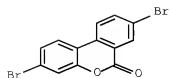
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2009073808	A	20090409	JP 2009-115201	20080429

Abstract The polyarylenes have structural repeating units represented by I (R = H, alkyl, alkoxy, allylthio, etc.; R1 = H, alkyl, alkoxy, aryl, cyano, Ar1 = arylene, heterocyclylene; Z = O, S, m, n = 2-4), preferably II (R, R1, Ar1 = same as above). Organic photoelectric converters, e.g., solar cells, have layers containing I show high photoelectric conversion efficiency. The photoelectric converters may also use fullerenes as electron acceptors.

Hit Structure

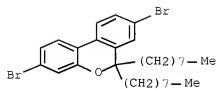
CAS Registry Number
 16102-99-3 CAPLUS

Chemical or Trade Name
 6,6'-Dibromo[3,3']pyran-6-one, 3,8-dibromo- (CA INDEX NAME)



CAS Registry Number
67013-66-3 CNF108

Chemical or Trade Name
6R-Gibenno[5,6]pyron, 3,8-dibromo-6,6-dioctyl- (CA INDEX NAME)



L6 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN

Accession Number
2008 09837 CAPLUS [Full text](#)

Document Number
150 222 169

Title

Application of two bromophenol compounds in preparing drugs for treating malignant tumor

Author/Inventor

SH, Dayong; Han, Lijun; Fan, Xiao; Xu, Fang; Liu, Quanwen

Patent Assignee/Corporate Source

Institute of Geochemistry, Chinese Academy of Sciences, P.O. Box 370, Beijing, China

Source

Farming Zhuanli Shenqing Gongshi Shuomingshu, fip CODEN CNIXEY

Document Type

Patent

Language

Chinese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101342198	A	20090114	CN 2007-10015296	20070713

Abstract

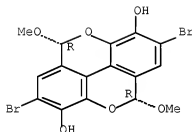
The invention provides two antitumor bromophenol compounds, i.e. 3-bromo-4-(3-bromo-4,5-dihydroxyphenyl)methyl-5-(ethoxycarbonyl)-2-diphenyl and 5R, 10R-2,7-dibromo-3,6-dihydroxy-5,10-dimethoxy-5,10-dihydro-benzopyran[5,4,3-cde]benzopyran, and their pharmaceutically acceptable salt, ester or ether, which have good inhibitory effect on protein tyrosine kinase. The invention also relates to application of said two bromophenol compounds in preparing drugs for treating malignant tumor with high C-Met receptor expression.

Hit Structure

CAS Registry Number
663569-74-3 CAPLUS

Chemical or Trade Name

[1]benzopyran[5,4,3-cde][1]benzopyran-3,8-diol,
2,7-dibromo-5,10-dihydro-5,10-dimethoxy-, (5R,10R)- (CA INDEX NAME)



L6 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN

Accession Number
2008 139717 CAPLUS [Full text](#)

Document Number
149 577 440

Title

Polymeric light emitting materials for thin films, light emitting devices, plane light sources, display devices, organic transistors and solar cells

Author/Inventor

Naguchi, Takamichi; Suzuki, Tomoyuki

Patent Assignee/Corporate Source

Sumitomo Chemical Company, Limited, Japan

Source

PCT Int. Appl., 76pp CODEN PPOXD2

Document Type

Patent

Language

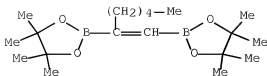
Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006/140057	A1	20061120	WO 2006-JP06664	20060509
JP 2006306871	A	20061225	JP 2006-123576	20060509

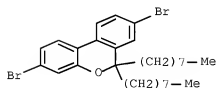
Abstract

The polymer compounds comprise a repeating unit (I) and/or a repeating unit (II), wherein R¹, R², R³, R⁴, R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, R¹¹, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁷, R¹⁸, R¹⁹, R²⁰, R²¹, R²², R²³, R²⁴, R²⁵, R²⁶, R²⁷, R²⁸, R²⁹, R³⁰, R³¹, R³², R³³, R³⁴, R³⁵, R³⁶, R³⁷, R³⁸, R³⁹, R⁴⁰, R⁴¹, R⁴², R⁴³, R⁴⁴, R⁴⁵, R⁴⁶, R⁴⁷, R⁴⁸, R⁴⁹, R⁵⁰, R⁵¹, R⁵², R⁵³, R⁵⁴, R⁵⁵, R⁵⁶, R⁵⁷, R⁵⁸, R⁵⁹, R⁶⁰, R⁶¹, R⁶², R⁶³, R⁶⁴, R⁶⁵, R⁶⁶, R⁶⁷, R⁶⁸, R⁶⁹, R⁷⁰, R⁷¹, R⁷², R⁷³, R⁷⁴, R⁷⁵, R⁷⁶, R⁷⁷, R⁷⁸, R⁷⁹, R⁸⁰, R⁸¹, R⁸², R⁸³, R⁸⁴, R⁸⁵, R⁸⁶, R⁸⁷, R⁸⁸, R⁸⁹, R⁹⁰, R⁹¹, R⁹², R⁹³, R⁹⁴, R⁹⁵, R⁹⁶, R⁹⁷, R⁹⁸, R⁹⁹, R¹⁰⁰, R¹⁰¹, R¹⁰², R¹⁰³, R¹⁰⁴, R¹⁰⁵, R¹⁰⁶, R¹⁰⁷, R¹⁰⁸, R¹⁰⁹, R¹¹⁰, R¹¹¹, R¹¹², R¹¹³, R¹¹⁴, R¹¹⁵, R¹¹⁶, R¹¹⁷, R¹¹⁸, R¹¹⁹, R¹²⁰, R¹²¹, R¹²², R¹²³, R¹²⁴, R¹²⁵, R¹²⁶, R¹²⁷, R¹²⁸, R¹²⁹, R¹³⁰, R¹³¹, R¹³², R¹³³, R¹³⁴, R¹³⁵, R¹³⁶, R¹³⁷, R¹³⁸, R¹³⁹, R¹⁴⁰, R¹⁴¹, R¹⁴², R¹⁴³, R¹⁴⁴, R¹⁴⁵, R¹⁴⁶, R¹⁴⁷, R¹⁴⁸, R¹⁴⁹, R¹⁵⁰, R¹⁵¹, R¹⁵², R¹⁵³, R¹⁵⁴, R¹⁵⁵, R¹⁵⁶, R¹⁵⁷, R¹⁵⁸, R¹⁵⁹, R¹⁶⁰, R¹⁶¹, R¹⁶², R¹⁶³, R¹⁶⁴, R¹⁶⁵, R¹⁶⁶, R¹⁶⁷, R¹⁶⁸, R¹⁶⁹, 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CFR 688013-66-3
CMF C29 H40 Br2 O

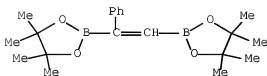


CAS Registry Number
1082173-69-8 CAGL078

Chemical or Trade Name
68-Gibbeno(b,d)pyran, 3,6-dibromo-6,6-diethyl-, polymer with
2,2'-(1,1'-phenylene)-2,2'-bis[6-(4,4,5,5-tetracarbonyl-1,3,2-dioxaborolane)]
(CA INDEX NAME)

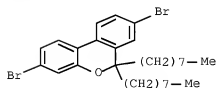
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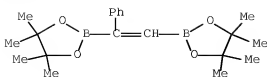


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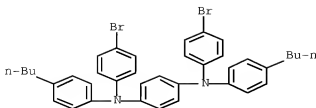
Chemical or Trade Name
68-Gibbeno(b,d)pyran, 3,6-dibromo-6,6-bis[4-(1,1-dimethylethylphenyl)-
polymer with 2,2'-(1,1'-phenylene)-2,2'-bis[6-(4,4,5,5-tetracarbonyl-1,3,2-
dioxaborolane)] (CA INDEX NAME)

ON
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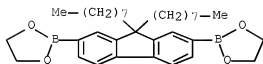


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CHEM
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CHEM 210347-09-2
CHEM 033 8445 92 04



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2008 731389 CAPLUS [FullText](#)

Document Number
146 180393

Title

Ureolatos, a tetraacyclic bromobenzaldehyde dimer from Polysiphonia ureolatos

Author/Inventor

Liu, C.-W., Tan, C.-H., Zhang, T., Zhang, G.-J., Han, L.-J., Fan, X., Zhu, D.-Y.

Patent Assignee/Corporate Source

Institute of Geochemistry, Chinese Academy of Sciences, Qingdao, 266071, Peop. Rep. China

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Journal of Asian Natural Products Research (2006), 8(4), 379-383 CODEN: JANRPH; ISSN: 1028-6020

Document Type

Journal

Language

English

Abstract

Ureolatos (1), a novel bromobenzaldehyde dimer, together with one known bromophenol, 5-bromo-4,5-dihydroxy-benzaldehyde (2), were isolated from the red alga Polysiphonia ureolatos. The structure and absolute stereochem. of 1 were elucidated to be (3R,16R)-2,7-dibromo-5,10-dihydroxy-5,10-dimethyl-8,10-dihydrochromene[6,4,3-cd]chromene, on the basis of spectroscopic techniques and X-ray diffraction anal.

Hit Structure

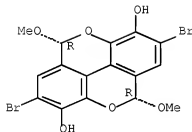
CAS Registry Number

83362-74-3 CAPLUS

Chemical or Trade Name

[1]benzopyran-5,4,3'-diol [1]benzopyran-3,8-diol,

2,7-dibromo-5,10-dihydro-5,10-dimethoxy-, (3R,16R)- (CA INDEX NAME)



L6 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number

2008 803771 CAPLUS [FullText](#)

Document Number

146 124668

Title

Polymer compound and its use in heat-resistant polymer light-emitting device

Author/Inventor

Kobayashi, Shinya; Kobayashi, Satoshi

Patent Assignee/Corporate Source

Sumitomo Chemical Company, Limited, Japan

Source

PCT Int. Appl. 154 pp CODEN: PIXXDZ

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO	KIND	DATE	APPLICATION NO	DATE
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WO 2006/070848	A1	2006/0708	WO 2005-JP04011	2005/1221
JP 2006/182820	A	2006/0713	JP 2004-378317	2004/1228
GB 2437213	A	2007/1017	GB 2007-14935	2005/1221
DE 112005003270	T5	2008/0410	DE 2005-112005003270	2005/1221
US 2008/0145571	A1	2008/0619	US 2007-722235	2007/0670
KR 2007/090041	A	2007/0904	KR 2007-717119	2007/0725
CN 101124259	A	2008/0213	CN 2005-80048421	2007/0817

Abstract

Disclosed is a polymer compound characterized by containing a structure represented by the following formula I (ring A and ring B independently represent an optionally substituted aromatic hydrocarbon ring, and ring C represents an aliphatic hydrocarbon which contains no fused aromatic compound while having at least one substituent; the aliphatic hydrocarbon may contain a heteroatom).

HR Structure

CAS Registry Number
856732-77-7 CASLOG

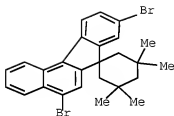
Chemical or Trade Name

6,8-Dibromo-1,4-dipyrene, 3,6-dibromo-6,6'-diethyl-, polymer with 5,8-dibromo-3',5',5'',5'''-tetramethyl[6,6']biphenyl-7,7'-diyl etherane] (5C1) (CA INDEX 30066)

CN

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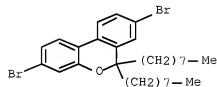
CFR 594732-73-3
CNF C26 R26 Rr2



CN

2

CFR 688013-66-3
CNF C26 R40 Rr2 0



L6 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN

Accession Number
2005 99991 CAPLUS [Full text](#)
Document Number
144.172724

Title
Polymeric compounds for thin polymer film devices

Author/Inventor
Ueda, Masato
Patent Assignee/Corporate Source
Sumitomo Chemical Company, Limited, Japan

Source
PCT Int. Appl., 72 pp. CODEN: P6CX02

Document Type
Patent

Language
Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006/011643	A1	2006/02/02	WO 2005-JP14136	2005/07/27
JP 2006/063334	A	2006/03/09	JP 2005-017025	2005/07/27
DE 112005001823	T9	2007/06/05	DE 2005-112005001823	2005/07/27
GB 2432837	A	2007/06/05	GB 2007-3608	2005/07/27
GB 2432837	B	2008/08/29		
CN 1891169	A	2007/06/27	CN 2005-00025103	2005/07/27
US 2008/0053422	A1	2008/01/03	US 2007-972913	2007/01/23
KR 2007/047314	A	2007/05/04	KR 2007-704336	2007/02/23

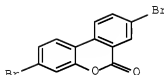
Abstract

The polymeric compounds with number average molecular weight 103-108 comprise repeating units I and II, wherein Ar1, Ar2 = independently, invariant aromatic hydrocarbon group or invariant heterocyclic group, X1, X2 = independently, O, S, C(=O), or C(O)X1, X2, Y = C or Si, R0 = halogen, alkyl, or allyl group, m = 0 or 1, n = 1-4 integer, and p = 0-2 integer. Thus, 6.66 g of 2,7-dibromofluorene was dissolved in 140 mL of a mixture of trifluoroacetic acid and morpholine, sodium perborate monohydrate was added therein, stirred for 50 h, 1.00 g of the resulting 3,6-dibromo-6H-dibenz[b,d]pyran-6-one was stirred with octyl magnesium bromide ring-closed with p-toluenesulfonic acid monohydrate, and reacted with bis(p-toluenesulfonyl)borane to give 6,6'-di-(2,7-dibromo-4,5,9,9-tetraethyl-11,12-dioxabenz[2,1-b]dithienyl)-2,2'-di-(4-ethoxyphenyl)-2,2'-dithiophene in the presence of tetrakis[triphenylphosphine]palladium for 16 h to give a copolymer, 0.2% solution of the resulting copolymer in chloroform was applied on a poly(3,4-ethylenedioxythiophene) (PEDOT)/sulfonic acid-coated ITO glass plate, lithium fluoride, calcium, and aluminum were deposited thereon in this order to give a thin film device, showing short-circuit current 43 $\mu\text{A}/\text{cm}^2$ and open circuit voltage 1.75 V.

HI Structure

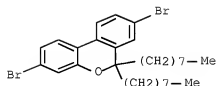
CAS Registry Number
16102-93-3 CAPLUS

Chemical or Trade Name
6,6'-Dibromo-6,6'-dipyran-6-one, 3,6'-dibromo- (CA INDEX NAME)



CAS Registry Number
665031-65-3 CAPLUS

Chemical or Trade Name
6,6'-Dibromo-6,6'-dipyran, 3,6'-dibromo-6,6'-di(2-ethyl)- (CA INDEX NAME)



L6 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN

Accession Number
2005 324209 CAPLUS [Full text](#)
Document Number
142.374970

Title
Polymer light-emitting material and polymer light-emitting device

Author/Inventor
Nakatsuji, Torayasu; Sekine, Chou; Mikami, Satoshi; Kobayashi, Satoshi
Patent Assignee/Corporate Source
Sumitomo Chemical Company, Limited, Japan

Source
PCT Int. Appl., 111 pp. CODEN: P6CX02

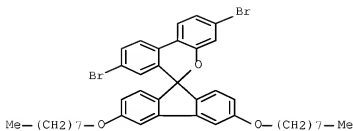
Document Type
Patent

Language
Japanese

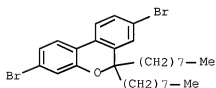
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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1
 CHEM 638013-72-1
 CHEM 641 8446 No.2 03



CHEM 638013-66-3
 CHEM 623 8449 No.2 0



LE ANSWER 8 OF 11 CAPLUG COPYRIGHT 2009 ACS on STN

Accession Number 2005324147 CAPLUG Fulltext

Document Number 142392812

Title Aromatic compounds having condensable functional groups useful as monomers

Author/Inventor

Kobayashi, Satoshi; Miura, Satoshi

Patent Assignee/Corporate Source

Suntomo Chemical Company, Limited, Japan

Source

PCT Int. Appl., 91 pp. CODEN: POKXD2

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005039260	A1	20050414	WO 2004-JP15001	20041005
JP 2005132828	A	20050526	JP 2004-282337	20041005
US 20070083190	A1	20070322	US 2006-074063	20060404

Abstract

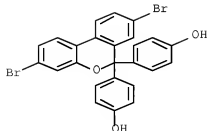
The present invention relates to aromatic compounds I, II, III, and IV, wherein Ar1, Ar3 = trivalent aromatic hydrocarbon or trivalent heterocyclic group; Ar2, Ar4, Ar5, Ar6, Ar7 = divalent aromatic hydrocarbon or divalent heterocyclic group; A1 = Z1, Z2Z3 or Z4, Z5, Z1, Z2, Z3 = O or S; Z4, Z5 = N, B, or P; and X1, X2, X3, X4, X5, X6, X7, X8, X9, X10, X11, X12 = halogen atom. Thus, 7.6 g (2.2 mmol) of 2,2,2,2-tetrafluoro-1,1'-biphenyl was reacted with 6.6 g (N-chlorosuccinimide, treated with boron tribromide, 4.8 g of the resulting 4,4'-dibromo-2,2',2',2'-tetrahydroxy-1,1'-biphenyl) was treated with o-dichlorobenzene for 10 h to give 5,7-dibromo-2,2'-dichlorobiphenyl.

Hit Structure

CAS Registry Number 849693-51-2 CAPLUG

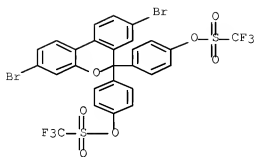
Chemical or Trade Name

Phenol, 4,4'-[3,3'-bis(4-bromo-6-(2,2,2,2-tetrafluoro-1,1'-biphenyl-4-ylidene)bis- (9CI) (OC) (1066)



CAS Registry Number 849693-51-2 CAPLUG

Chemical or Trade Name
Hexafluoroisopropylidene, tri(1-fluoro-, 3,5-dibromo-6H-dibenzo[b,d]pyran-6-ylidene)di-4,1-phenylene water (9CI) (CA INDEX NAME)



LG ANSWER 8 OF 11 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number:
2004 992902 CAPLUS Bulletin

Document Number:
140 415047

Title
High-molecular compounds and polymer light-emitting devices made by using the same

Author/Inventor
Oki, Shuji; Kobayashi, Satoshi; Noguchi, Takanobu

Patent Assignee/Corporate Source
Sumitomo Chemical Company, Limited, Japan

Source
PCT Int. Appl. 131 pp CODEN: PXXXX

Document Type
Patent

Language
Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004/038559	A1	20040513	WO 2003-JP12897	20031009
JP 2004168999	A	20040517	JP 2003-343244	20031001
AU 2003268752	A1	20040525	AU 2003-268752	20031003
EP 1571170	A1	20050907	EP 2003-746697	20031003
US 20060138651	A1	20060612	US 2005-032937	20050428

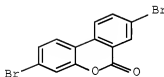
Abstract

The invention relates to a high-mol. compds. comprising repeating units represented by the general formula I or II and having number-average mol. wts. of 103-108 in terms of polyethylene. (1) wherein Ar1 and Ar2 are each independently a trivalent aromatic hydrocarbon group or a trivalent heterocyclic group, and X1 and X2 are each independently O, S, C(=O), Si(=O), SO2, C(R1)(R2), Si(R3)(R4), N(R5), B(R6), P(R7), or P(=O)(R8), with the proviso that X1 and X2 must not be the same and that X1 and Ar2 are bonded resp. to the adjacent carbon atoms constituting the aromatic ring of Ar1, and X2 and Ar1 are bonded resp. to the adjacent carbon atoms constituting the aromatic ring of Ar2 (2) wherein Ar3 and Ar4 are each independently a trivalent aromatic hydrocarbon group or a trivalent heterocyclic group, and X3 and X4 are each independently N, B, P, C(R9), or Si(R10), with the proviso that X3 and X4 must not be the same and that X3 and Ar4 are bonded resp. to the adjacent carbon atoms constituting the aromatic ring of Ar3, and X4 and Ar3 are bonded resp. to the adjacent carbon atoms constituting the aromatic ring of Ar4

HR Structure

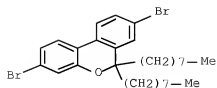
CAS Registry Number
16103-93-3 CAPLUS

Chemical or Trade Name
6H-Dibenzo[b,d]pyran-6-one, 3,9-dibromo- (CA INDEX NAME)



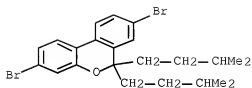
CAS Registry Number
688023-66-3 CAPLUS

Chemical or Trade Name
6H-Dibenzo[b,d]pyran, 3,9-dibromo-6,6-diethyl- (CA INDEX NAME)



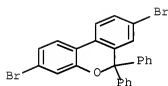
CAS Registry Number
68023-67-4 CAS109

Chemical or Trade Name
6,6'-Dibromo[1,1'-bipyrene, 3,3'-bis(3-methylbutyl)- (CA INDEX NAME)



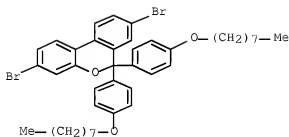
CAS Registry Number
68023-68-5 CAS109

Chemical or Trade Name
6,6'-Dibromo[1,1'-bipyrene, 3,3'-bis(3-methylbutyl)- (CA INDEX NAME)



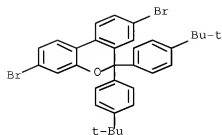
CAS Registry Number
68023-69-6 CAS109

Chemical or Trade Name
6,6'-Dibromo[1,1'-bipyrene, 3,3'-bis(3-methylbutyl)- (CA INDEX NAME)



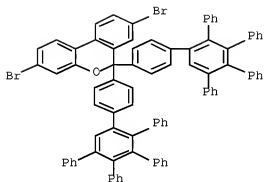
CAS Registry Number
68023-70-9 CAS109

Chemical or Trade Name
6,6'-Dibromo[1,1'-bipyrene, 3,3'-bis(3-methylbutyl)- (CA INDEX NAME)



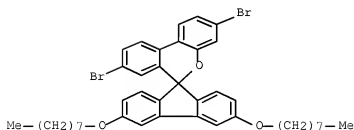
CAS Registry Number
688013-11-0 CAS105

Chemical or Trade Name
6,6'-Dibromo-2,2'-(1,1'-bis(4-tert-butylphenyl))-3,3'-biisobenzofuran (9CI) (CA INDEX NAME)



CAS Registry Number
688013-12-1 CAS105

Chemical or Trade Name
Spiro[6,6]-dibenzobispyran-6,6'-[9,9'-fluorene]-3,9'-dibromo-3',6'-bis(octyloxy)- (CA INDEX NAME)

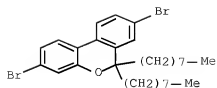


CAS Registry Number
688013-10-7 CAS105

Chemical or Trade Name
6,6'-Dibromo-3,3'-bis(octyl)-, homopolymer (9CI) (CA INDEX NAME)

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CFM 688013-66-3
CMF C29 H40 Br2 O

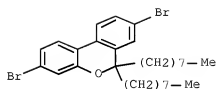


CAS Registry Number
689013-10-0 CNF108

Chemical or Trade Name
68-Gibencol[2]dipyrans, 3,6-dibromo-6,6'-diethyl-, polymer with
1,4-dibromo-2,5-bis(diheptyloxy)benzene (SCT) (CA INDEX NAME)

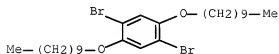
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CFR 152269-96-2
CMF C26 844 Br 2 02

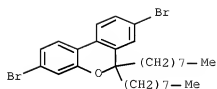


CAS Registry Number
689013-30-1 CNF109

Chemical or Trade Name
68-Gibencol[2]dipyrans, 3,6-dibromo-6,6'-diethyl-, polymer with
3,7-dibromo-2,5-bis(diheptyloxy)dibenzothiophene (SCT) (CA INDEX NAME)

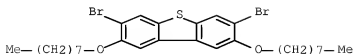
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CFR 599212-67-6
CMF C31 839 Br 2 02 2



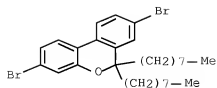
CAS Registry Number
689013-31-2 CNF109

Chemical or Trade Name
68-Gibencol[2]dipyrans, 3,6-dibromo-6,6'-diethyl-, polymer with
3,7-dibromo-2,5-bis(diheptyloxy)dibenzothiophene (SCT) (CA INDEX NAME)

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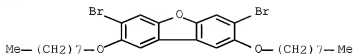
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CMF C28 H50 Hc2 03

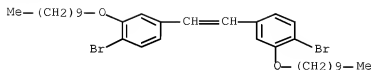


CAS Registry Number
688013-93-4 CML05

Chemical or Trade Name
6,6'-Dibromo-3,3'-bis(4-methyloctyloxy)spiro[3.3]heptane, polymer with
1,1'-(1,3-ethenediyl)bis[4-bromo-3-(decyloxy)benzene] (PCE) (CA 10086
NAME)

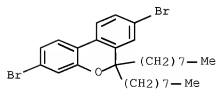
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CFM 688013-66-3
CMF 029 H40 Hc2 0

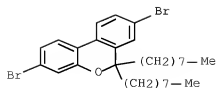


CAS Registry Number
688013-94-5 CML05

Chemical or Trade Name
Benzeneamine, N,N-bis(4-bromophenyl)-4-(1-methylpropyl)-, polymer with
3,3'-dibromo-4,4'-diethyl-2,2'-bis(4-methyloctyloxy)diphenyl ether (PCE) (CA 10086
NAME)

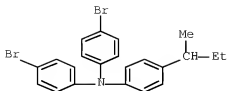
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CFM 281916-94-7
CMF C22 H21 Hc2 0

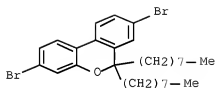


CAS Registry Number
688013-66-3 CAPLIS

Chemical or Trade Name
1,4-Bis(bromophenyl)-N,N'-bis(4-bromophenyl)-N,N'-bis(6-ethylphenyl)-,
polymer with 3,8-dibromo-6,6-diethyl-6H-dibenzo[b,d]pyran (9CI) (CA 13065X
(NMS))

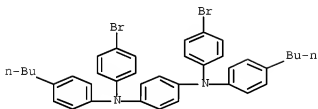
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CFR 312200-89-0
CMF C39 H59 Br2 N2

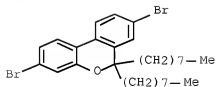


CAS Registry Number
688013-66-3 CAPLIS

Chemical or Trade Name
1,4-Bis(bromophenyl)-N,N'-bis(4-bromophenyl)-N,N'-bis(6-ethylphenyl)-,
polymer with 3,8-dibromo-6,6-diethyl-6H-dibenzo[b,d]pyran (9CI) (CA 13065X
(NMS))

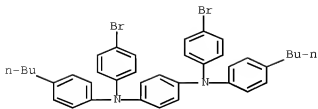
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CMF C39 H59 Br2 N2

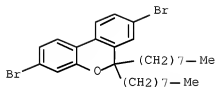


CAS Registry Number
68021-95-7 CASREG

Chemical or Trade Name
1,4-Bis(4-bromophenyl)-N,N'-bis[4-(n-butylphenyl)-, polymer with 3,7-dibromo-2,8-bis(acetyloxy)dibenzothiophene and 3,8-dibromo-6,6-diacetyl-6H-dibenz[*b,h*]pyrene (9CI) (CA INDEX NAME)

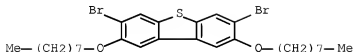
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CFR 68013-66-3
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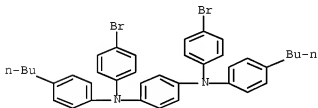
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CFR 599212-67-6
CMF C29 H36 Br2 O2 S



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CFR 372200-89-0
CMF C38 H50 Br2 N2

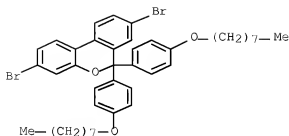


CAS Registry Number
68021-97-9 CASREG

Chemical or Trade Name
2,8-Dibromo-6,6-bis[4-(n-butylphenyl)-, 3,8-dibromo-6,6-bis[4-(n-butylphenyl)-, homopolymers (9CI) (CA INDEX NAME)

CN
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CFR 68013-69-6
CMF C41 H48 Br2 O3

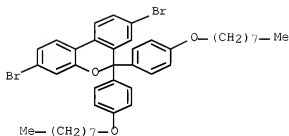


CAS Registry Number
688013-89-9 CAS#105

Chemical or Trade Name
1,4-bis(4-bromophenyl)-3,5-bis[4-(6-butoxyphenyl)-2-bromophenyl]-2,2-diphenyl-4,4'-dibenzobipyrrole with 3,5-dibromo-6,6-bis[4-(octyloxyphenyl)]-50-dibenzobipyrrole
(92:1) (CA 1305X NMR)

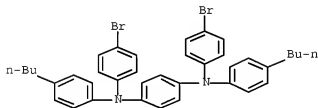
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CFN 688013-69-6
CMF C41 R49 Re2 O3



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CFN 372200-89-0
CMF C38 H58 Re2 Y2

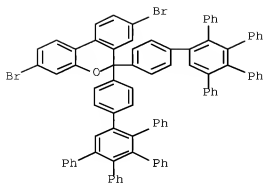


CAS Registry Number
688013-89-0 CAS#105

Chemical or Trade Name
66-Dibenzobipyrrole, 3,5-dibromo-6,6-bis[3',4',5'-triphenyl]-, 1'':2'',1''-triphenyl-1'-yl-7-yl-, homopolymer
(92:1) (CA 1305X NMR)

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CFN 688013-71-0
CMF C38 H58 Re2 O

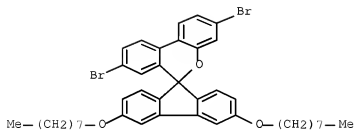


CAS Registry Number
688013-90-3 CAS#

Chemical or Trade Name
Spiro[6,6]dibenzos[1,2-c:4,5-c']pyran-6,9'-[9H]fluorene],
7,8-dibromo-3',6'-bis(phenyl)-, isomopolymer (DCI) (CA INDEX NAME)

CM
1

CFR 688013-72-1
CMF C41 B46 Br2 O3



L6 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number

1979 940744 CAPLUS [Fulltext](#)

Document Number

91140744

Title

Synthesis of 2,7-disubstituted 5,10-dioxo-4,5,9,10-tetrahydro-4,9-dioxapyrenes

Author/Inventor

Mogachev, G I

Patent Assignee/Corporate Source

Naučno-Issled. Inst. Plast. Mass, Moscow, USSR

Source

Zhurnal Vsesoyuznogo Khimicheskogo Obshchestva im. D. I. Mendeleeva (1979), 24(8), 907-8 CODEN: ZVKH66, ISSN: 0073-0247

Document Type

Journal

Language

Russian

Abstract

Nitriding o-H₂COC₆H₄C₆H₄CO₂H-o with HNO₃-H₂SO₄ at 100° gave 90% I, which was hydrogenated over Raney Ni in DMF to give 80-9% II (R = NH₂). Diazotization of II (R = NH₂) followed by treatment with hypophosphorous acid gave 66% II (R = H). II (R = Cl, Br, Iodo, CN, NHAc, OH, OAc, NO₂) were prepared in 73-98% yield similarly.

Hi Structure

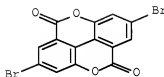
CAS Registry Number

71540-29-9 CNLUS

Chemical or Trade Name

[1]benzopyrene[3,4,3'-cde][1]benzopyrene-5,10-dione, 2,7-dibromo- (DC1) (CA

INDEX NAME)



L6 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number

1968 104896 CAPLUS [Fulltext](#)

Document Number

66 104896

Title

Persulfate oxidation of carbonyl acids. III. Oxidation of cis-cinnamic and biphenyl-2-carboxylic acids

Author/Inventor

Boon, Patricia Margaret, Russell, James, Thomson, Ronald H, Wyle, A. G.

Patent Assignee/Corporate Source

Univ. Aberdeen, Aberdeen, UK

Source

Journal of the Chemical Society [Section] C: Organic (1968), (7), 642-6 CODEN: JSCOAX, ISSN: 0022-4952

Document Type

Journal

Language

English

Abstract

3,4-Benzocoumarins were obtained by oxidative cyclization of biphenyl-2-carboxylic acids. The parent benzo coumarin was also formed by oxidation of 2'-substituted acids with elimination of the substituent (OMe, NO₂, and COOH) and in low yield Me and Cl. But 2-benzylbiphenyl-2-carboxylic acid gave 5-benzyl-3,4-benzocoumarin and 2'-cyanobiphenyl-2-carboxylic acid yielded fluorenone and phenanthridine-1,10-carbolactone. Similar oxides of cis-cinnamic acids gave poor yields of coumarins, markedly increased by the presence of an o-methoxy group. The mechanisms of these reactions are discussed. 47 references.

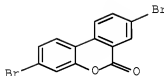
Hi Structure

CAS Registry Number

16102-99-3 CNLUS

Chemical or Trade Name

6R-Dibenz[a,h]pyrene-6-one, 3,8-dibromo- (CA INDEX NAME)



=>

=>

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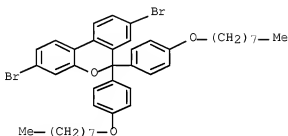
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L2          3 SEA SSS SAM L1

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L2 3 ANSWERS  REGISTRY  COPYRIGHT 2009 ACS on STN
Author/Inventor
8H-Cbzene[b,d]pyran, 3,8-dibromo-6,6-bis[4-(6-oxaheptyl)phenyl]- homopolymer (9C1)
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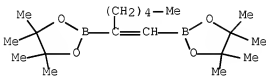


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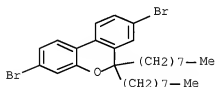
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L2 3 ANSWERS  REGISTRY  COPYRIGHT 2009 ACS on STN
Author/Inventor
8H-Cbzene[b,d]pyran, 3,8-dibromo-6,6-diethyl-, polymer with 2,2'-(1-pentyl-1,2-ethenediyl)bis[4,4,5,5-tetramethyl-1,3,2-dioxaboline]
HR Structure
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CN
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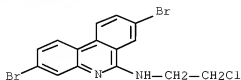


L2 3 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

Author/Inventor

6-Phenanthridinamine, 3,8-dibromo-N-(2-chloroethyl)-

Hit Structure



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ALL ANSWERS HAVE BEEN SCANNED

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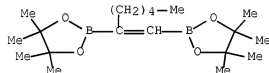
L4 2 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

Author/Inventor

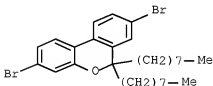
6H-Chenodecylidipyran, 3,8-dibromo-6,8-diethyl-, polymer with 2,2'-(1-phenyl-1,2-ethenediyl)bis[4,4,5,5-tetramethyl-1,3,2-dioxaborolane]

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CH
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L4 2 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

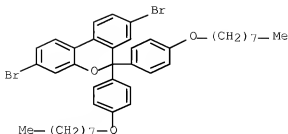
Author/Inventor

6H-Chenodecylidipyran, 3,8-dibromo-6,8-diethyl-, homopolymer (HCl)

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PROPERTY DATA AVAILABLE IN THE "PROP" FORMAT
ALL ANSWERS HAVE BEEN SCANNED

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L7 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
2008-655771 CAPLUS File:ps

Document Number
149 124986

Title
Polymer compound and its use in heat-resistant polymer light-emitting device

Author/Inventor
Kobayashi, Shigeyu, Kobayashi, Satoshi
Patent Assignee/Corporate Source
Sumitomo Chemical Company, Limited, Japan

Source
PCT Int. Appl., 154 pp CODEN: PXXXX

Document Type
Patent

Language
Japanese

PATENT NO	KIND	DATE	APPLICATION NO.	DATE
WO 2004070949	A1	20040704	WO 2005-3924011	20051221
JP 2004182920	A	20040713	JP 2004-378517	20041229
GB 2437213	A	20071017	GB 2007-14555	20051221
DE 112005003270	T5	20060410	DE 2005-112005003270	20051221
US 20040145571	A1	20060619	US 2007-722225	20070620
KR 2007090041	A	20070924	KR 2007-717119	20070725
CN 101124259	A	20060213	CN 2005-80049421	20070617

Abstract

Disclosed is a polymer compound characterized by containing a structure represented by the following formula I (ring A and ring B independently represent an optionally substituted aromatic hydrocarbon ring, and ring C represents an alkydic hydrocarbon which contains no fused aromatic compound while having at least one substituent; the alkydic hydrocarbon may contain a heteroatom)

Hit Structure

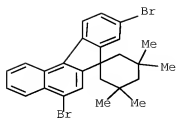
CAS Registry Number
896732-75-7 CAPLUS

Chemical or Trade Name
6,6'-Dibromo-4,4'-biphenyl, 3,9-dibromo-6,6'-diethyl-, polymer with
5,8-dibromo-3',3'',5'',5'''-tetraethynyl[spiro[70-benzo[6]fluorene-7,1'-cyclohexene]] (SOL) (CA 100000 NAME)

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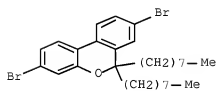
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CN 896732-75-3
CNF C26 H24 Br2



CM
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CFR 688Q13-66-3
CMF C23 8440 No.2 0



L7 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2009 ACS on ISTN

Accession Number
2005-09991 CAPLUS [Full-text](#)
Document Number
144.172274

Title
Polymeric compounds for thin polymer film devices
Author Inventor
Ueda, Masato
Patent Assignee/Corporate Source
Sumitomo Chemical Company, Limited, Japan
Source
PCT Int. Appl., 72 pp. CODEN: PBKX02

Document Type
Patent

Language
Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004011443	A1	20040202	WO 2005-0914156	20050727
JP 2004063334	A	20040309	JP 2005-217025	20050727
BR 112005001823	T5	20070454	BR 2005-112005001823	20050727
GB 2432837	A	20070454	GB 2007-3494	20050727
GB 2432837	B	20060620		
CN 1999169	A	20070427	CN 2005-10025103	20050727
US 20050039422	A1	20060103	US 2007-072913	20070123
KR 2007047314	A	20070554	KR 2007-704334	20070223

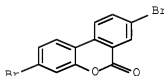
Abstract

The polymeric compounds with number average mol. weight 103-106 comprise repeating units I and II, wherein Ar1, Ar2 = independently, trivalent aromatic hydrocarbon group or trivalent heterocyclic group, X1, X2 = independently, O, S, Cl, Cl, Si(O), or Si(O) (X3), Y = C or Si, R0 = halogen, alkyl, or alkylthio, m, n = 0 or 1, p, q = 1-4 integer, and r = 0-2 integer. Thus, 6.66 g of 2,7-dibromofluorene was dissolved in 140 mL of 1:1 mixture of trifluoroacetic acid/chloroform, sodium perborate monohydrate was added therein, stirred for 50 h. 1.00 g of the resulting 1,5-dibromo-6H-dibenzofluorene-9-one was stirred with octyl magnesium bromide, ring-closed with potassium acetate and chloroform, and reacted with bisphenol A/dibromoisobutane to give 6,6'-diisopropyl-2,2'-bis[4-(4,5-dibromophenyl)-1,3,2-oxadiazol-5-yl]-4,4'-diaminodiphenyl ether, 0.42 g of which was reacted with 0.25 g of 8,8'-dibromo-2,2'-dithiophene in the presence of tetrakis[triphenylphosphine]palladium for 16.3 h to give a copolymer. 0.2% solution of the resulting copolymer in chloroform was applied on a poly(3,4-ethylenedioxythiophene) poly(ethylene sulfone) acid-coated ITO-glass plate, lithium fluoride, calcium, and aluminum were deposited thereon in this order to give a thin film device, showing short-circuit current 43 μ A/cm² and open circuit voltage 1.75 V.

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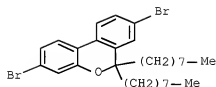
CAS Registry Number
16102-99-3 CAPLUS

Chemical or Trade Name
6,6'-Dibenzobis[6]pyrene-6-one, 3,8-dibromo- (CA INDEX NAME)



CAS Registry Number
685031-65-3 CAPLUS

Chemical or Trade Name
6,6'-Dibenzobis[6]pyrene, 3,8-dibromo-6,6'-diisopropyl- (CA INDEX NAME)



L7 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2009 ACS on ISTN

Accession Number
2002-24209 CAPLUS [Full-text](#)
Document Number
142.374970

Title
Polymer light-emitting material and polymer light-emitting device
Author Inventor
Nakatani, Tomoya; Sekine, Chizu; Mizumi, Satoshi; Kobayashi, Satoshi
Patent Assignee/Corporate Source
Sumitomo Chemical Company, Limited, Japan
Source
PCT Int. Appl., 111 pp. CODEN: PBKX02

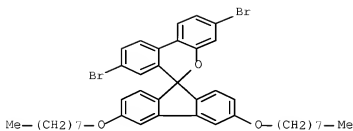
Document Type
Patent

Language
Japanese

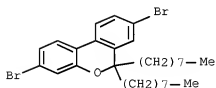
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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 CHEM 638013-72-1
 CHEM 641 844 842 03



CHEM 638013-66-3
 CHEM 623 849 842 0



L7 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number 2005324147 CAPLUS Bulletin

Document Number 142392812

Title Aromatic compounds having condensable functional groups useful as monomers

Author/Inventor Katsuyoshi, Satoshi; Mitsui, Satoshi

Patent Assignee/Corporate Source Sumitomo Chemical Company, Limited, Japan

Source PCT Int. Appl., 91 pp. CODEN: POKX22

Document Type Patent

Language Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005033090	A1	20050414	WO 2004-391501	20041005
JP 2005132829	A	20050526	JP 2004-292337	20041005
US 20070963192	A1	20070322	US 2006-574563	20060404

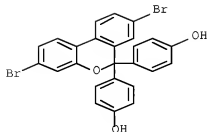
Abstract

The present invention relates to aromatic compounds I, II, III, and IV, wherein Ar1, Ar2, Ar3, Ar4, Ar5, Ar6, Ar7 = trivalent aromatic hydrocarbon or trivalent heterocyclic group; Ar8, Ar9, Ar10, Ar11, Ar12 = trivalent aromatic hydrocarbon or trivalent heterocyclic group; A1 = 21, 22, 23 or 24, 25, 21, 22, 23 = O or S, 24, 25 = N, B, or P, and X1, X2, X3, X4, X5, X6, X7, X8, X9, X10, X11, X12 = halogen atom. Thus, 7.6 g (2.2 mmol) of 4-bromophenyl-1,1'-biphenyl was reacted with 6.6 g (4.4 mmol) of N-chlorosuccinimide, treated with boron tribromide, 4.6 g of the resulting 4,4'-dibromo-2,2',5,5'-tetrahydroxy-1,1'-biphenyl was treated with 5-chlorobenzene for 10 h to give 5,7-dibromo-2,2'-dichlorobiphenyl.

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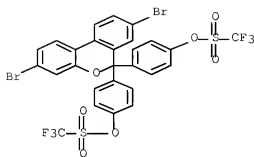
CAS Registry Number 849693-30-1 CAPLUS

Chemical or Trade Name Phenol, 4,4'-[3,5-dichloro-6H-dibenzo(b,d)pyran-6-ylidene]bis- (9CI) (CA 75023 10461)



CAS Registry Number 849693-51-2 CAPLUS

Chemical or Trade Name
Hexafluoroantonic acid, tris(fluoro-, 3,6-dibromo-6H-dibenzo[h,d]pyran-6-ylidene)di-6,1-phenylene water (9CI) (CA INDEX NAME)



L7 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number:
2004 95202 CAPLUS Fulltext

Document Number:
140 415047

Title
High-molecular compounds and polymer light-emitting devices made by using the same

Author/Inventor
Oki, Shuji; Kobayashi, Satoshi; Noguchi, Takanobu

Patent Assignee/Corporate Source
Sumitomo Chemical Company, Limited, Japan

Source
PCT Int. Appl. 131 pp CODEN: PXXXX

Document Type
Patent

Language
Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004039059	A1	20040513	WO 2003-3912697	20031003
JP 2004168999	A	20040617	JP 2003-343244	20031001
KI 2003268752	A1	20040525	KI 2003-268752	20031003
KP 1571179	A1	20050907	KP 2003-744697	20031003
US 20090138651	A1	20090612	US 2005-532937	20050428

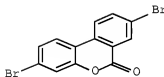
Abstract

The invention relates to a high-mol. compts. comprising repeating units represented by the general formula I or II and having number-average mol. wts. of 103-108 in terms of polystyrene. (I) wherein Ar1 and Ar2 are each independently a trivalent aromatic heterocyclic group or a trivalent heterocyclic group, and X1 and X2 are each independently O, S, C(=O), Se, C(=O), SO2, C(R1)(R2), Si(R3)(R4), N(R5), B(R6), P(R7), or P(=O)(R8), with the proviso that X1 and X2 must not be the same and that X1 and Ar2 are bonded resp. to the adjacent carbon atoms constituting the aromatic ring of Ar1, and X2 and Ar1 are bonded resp. to the adjacent carbon atoms constituting the aromatic ring of Ar2; (II) wherein Ar3 and Ar4 are each independently a trivalent aromatic heterocyclic group or a trivalent heterocyclic group, and X3 and X4 are each independently N, B, P, C(R6), or Si(R10), with the proviso that X3 and X4 must not be the same and that X3 and Ar4 are bonded resp. to the adjacent carbon atoms constituting the aromatic ring of Ar3, and X4 and Ar3 are bonded resp. to the adjacent carbon atoms constituting the aromatic ring of Ar4.

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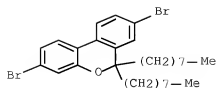
CAS Registry Number
16102-99-3 CAPLUS

Chemical or Trade Name
6H-Dibenzo[h,d]pyran-6-one, 3,6-dibromo- (CA INDEX NAME)



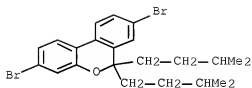
CAS Registry Number
688013-66-3 CAPLUS

Chemical or Trade Name
6H-Dibenzo[h,d]pyran, 3,6-dibromo-6,6-diethoxy- (CA INDEX NAME)



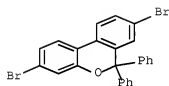
CAS Registry Number
68023-67-4 CAS108

Chemical or Trade Name
6,6'-Dibromo[1,1'-bipyrene, 3,3'-bis(3-methylbutyl)- (CA INDEX NAME)



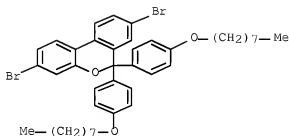
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68023-68-5 CAS108

Chemical or Trade Name
6,6'-Dibromo[1,1'-bipyrene, 3,3'-bis(3-methylbutyl)- (CA INDEX NAME)



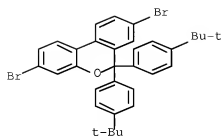
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68023-69-6 CAS108

Chemical or Trade Name
6,6'-Dibromo[1,1'-bipyrene, 3,3'-bis(3-methylbutyl)- (CA INDEX NAME)



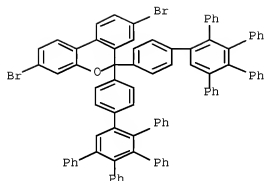
CAS Registry Number
68023-70-9 CAS108

Chemical or Trade Name
6,6'-Dibromo[1,1'-bipyrene, 3,3'-bis(3-methylbutyl)- (CA INDEX NAME)



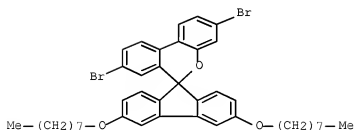
CAS Registry Number
685033-71-0 CAS105

Chemical or Trade Name
6,8-Dibromo-5,6-bis(3',4',5'-terphenyl-1,1'',1'''-tert-butyl)-2-pyran (PCT) (CA INDEX NAME)



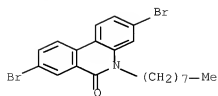
CAS Registry Number
685033-72-1 CAS105

Chemical or Trade Name
Spiro[6,6]12-dibenzopyran-6,9'-[9,9]fluorene-3,8-dibromo-3',6'-bis(octyloxy)- (CA INDEX NAME)



CAS Registry Number
685033-77-6 CAS105

Chemical or Trade Name
6,8-Dibromo-5-octyl- (CA INDEX NAME)

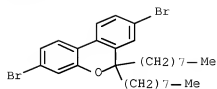


CAS Registry Number
688013-18-7 CAS1/05

Chemical or Trade Name
4,8-Dibromo-6,6-diethyl-, 3,9-dibromo-6,6-diethyl-, homopolymer (PCL) (CA INDEX NAME)

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CFN 688013-66-3
CMF C29 R40 R62 0

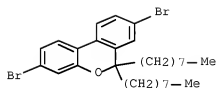


CAS Registry Number
688013-19-8 CAS1/05

Chemical or Trade Name
4,8-Dibromo-6,6-diethyl-, 3,9-dibromo-6,6-diethyl-, polymer with 1,4-dibromo-2,5-bis(dodecyl)benzene (PCL) (CA INDEX NAME)

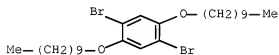
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CMF C29 R40 R62 0



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CFN 152269-90-2
CMF C26 R44 R62 02

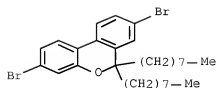


CAS Registry Number
688013-80-1 CAS1/05

Chemical or Trade Name
4,8-Dibromo-6,6-diethyl-, 3,9-dibromo-6,6-diethyl-, polymer with 3,7-dibromo-2,5-bis(dodecyl)dibenzothiophene (PCL) (CA INDEX NAME)

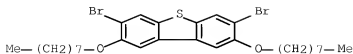
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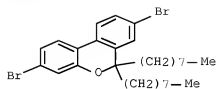


CAS Registry Number
688013-81-2 CAS1/5

Chemical or Trade Name
6,8-Dibromo[6,6]pyrene, 3,9-dibromo-6,6-diethyl-, polymer with
3,9-dibromo-2,8-bis(isoalkoxy)dibenzofuran (9CI) (CA INDEX NAME)

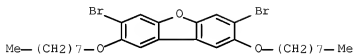
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CMF C29 H40 Br2 O



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CFM 688013-92-1
CMF C29 H40 Br2 O3

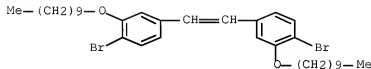


CAS Registry Number
688013-81-4 CAS1/5

Chemical or Trade Name
6,8-Dibromo[6,6]pyrene, 3,9-dibromo-6,6-diethyl-, polymer with
1,1'-(1,2-ethanediyl)bis[4-bromo-3-(decyloxy)benzene] (9CI) (CA INDEX
NAME)

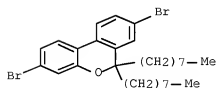
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CMF C29 H40 Br2 O

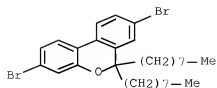


CAS Registry Number
688013-84-5 CAS1/5

Chemical or Trade Name
Benzonitrile, N,N-bis(4-bromophenyl)-4-(1-methylpropyl)-, polymer with
3,8-dibromo-6,6-diethyl-2,8-dibromo[6,6]pyrene (9CI) (CA INDEX NAME)

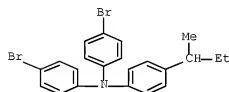
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CFM 688013-66-3
CMF C29 H40 Br2 O



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CHE 287976-94-7
CMF C22 B02 Br2 9

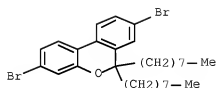


CAS Registry Number
688013-66-3 CAPI/09

Chemical or Trade Name
1,4-Benzenediamine, N,N'-bis[4-(bromophenyl)]-N,N'-bis[4-(ethylphenyl)]-,
polymer with 3,5-dibromo-6,6'-diethyl-28-dibenz[9,9']pyran (PCL) (CA INDEX
N000)

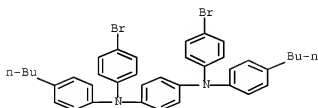
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CMF C29 B40 Br2 0



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CHE 372200-89-0
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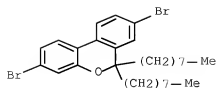


CAS Registry Number
688013-66-3 CAPI/09

Chemical or Trade Name
1,4-Benzenediamine, N,N'-bis[4-(bromophenyl)]-N,N'-bis[4-(n-butylphenyl)]-,
polymer with 3,5-dibromo-6,6'-diethyl-28-dibenz[9,9']pyran (PCL) (CA INDEX
N000)

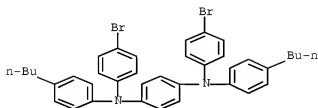
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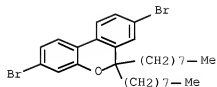


CAS Registry Number
688013-66-3

Chemical or Trade Name
1,4-bis(4-bromophenyl)-N,N'-bis[4-(4-bromophenyl)-4'-butylphenyl]-
polymer with 3,3'-dibromo-2,2'-bis(octyloxy)dibenzothiophene and
3,3'-dibromo-4,4'-diethyl-6,6'-diphenylpyrene (PCL) (CA, INDOX NAME)

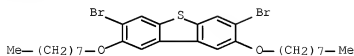
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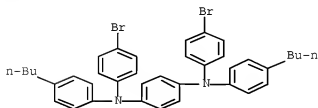
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CFR 599212-67-6
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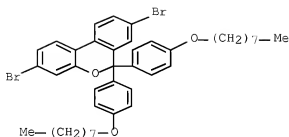
CAS Registry Number
688013-66-3

Chemical or Trade Name

6,6'-Dibenzob,dipyran, 3,3'-dibromo-6,6'-bis[4-(octyloxy)phenyl]-, homopolymer (9C1) (CA INDEX NAME)

CN 1

CFR 68013-69-6
CMF C41 H49 Br2 O3

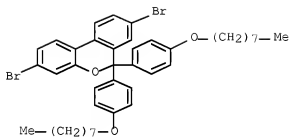


CAS Registry Number
68013-69-6 CAS103

Chemical or Trade Name
1,4-Benzenediamine, N,N'-bis[4-bromophenyl]-N,N'-bis[4-butylphenyl]-, polymer with 3,3'-dibromo-6,6'-bis[4-(octyloxy)phenyl]-6,6'-dibenzob,dipyran (9C1) (CA INDEX NAME)

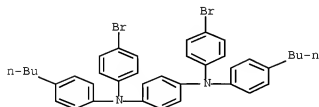
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CFR 68013-69-6
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CN 2

CFR 372209-09-0
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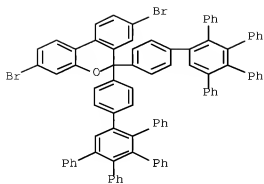


CAS Registry Number
68013-69-6 CAS103

Chemical or Trade Name
6,6'-Dibenzob,dipyran, 3,3'-dibromo-6,6'-bis[4-(3',4',5'-triphenyl[1,1',2',1''-terphenyl]-8-yl)]-, homopolymer (9C1) (CA INDEX NAME)

CN 1

CFR 68013-71-0
CMF C85 H56 Br2 O

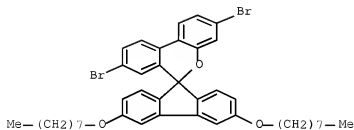


CAS Registry Number
688013-90-3 CAS#

Chemical or Trade Name
Spiro[6,6]dibenzos[1,2-c:4,5-c']pyran-6,9'-[9H]fluorene],
7,8-dibromo-3',6'-bis(phenyl)-, isomopolymer (NCl) (CA INDEX NAME)

CM
1

CFR 688013-72-1
CMF C41 B46 Br2 O3



L7 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number 1982110888 CAPLUS [Full text](#)

Document Number 92110888

Title

Studies of phenanthridone and tetrahydrodiazapyrene. 2: Synthesis of 2,7-diamino-5,10-dioxo-4,9,10-tetrahydro-4,9-diazapyrene and its derivatives

Author/Inventor

Mogachev, G I.; Terent'ev, A. M.; Usodov, V. I.

Patent Assignee/Corporate Source

Naučno-Issled. Inst. Plast. Mass., Moscow, 111112, USSR

Source

Khimiya Geterotsiklicheskikh Soedinenii (1979), (12), 1672-7 CODEN: KHOSAO, ISSN: 0453-8234

Document Type

Journal

Language

Russian

Abstract

Treatment of acid I with $\text{H}_2\text{C}_2\text{O}_4$ gave 61% diazapyrene II (R = NH₂), whereas the hydrogenation of I over Ni gave 88% III (R = NH₂). II (R = NH₂) was refluxed with Ac_2O to give 91% IV (R = H). IV (R = Ac) could not be obtained from II (R = NH₂) or IV (R = H) but was obtained from I via reduction to the tetraamine. II (R = H, Cl, Br, I, CN, NO₂, OH) were prepared in 84-91% yield from II (R = NH₂), e.g., by desulfonation. III (R = H, Cl, Br, I, CN, OH) were also prepared in 80-92% yield.

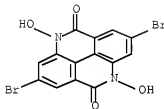
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CAS Registry Number

72979-10-1 CAPLUS

Chemical or Trade Name

Frydido(2,4,3,6,5-3ax)phenanthridine-5,10-dione,
2,7-dibromo-4,9-dihydro-4,9-dihydroxy- (CA: 33026X 30865)



L7 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number 1979540744 CAPLUS [Full text](#)

Document Number 91140744

Title

Synthesis of 2,7-disubstituted 5,10-dioxo-4,9,10-tetrahydro-4,9-diazapyrenes

Author/Inventor

Mogachev, G. I.

Patent Assignee/Corporate Source

Naučno-Issled. Inst. Plast. Mass., Moscow, USSR

Source

Zhurnal Vsesoyuznogo Khimicheskogo Obshchestva im. D. I. Mendeleeva (1979), 24(3), 367-8 CODEN: ZHVOAM, ISSN: 0373-0247

Document Type

Journal

Language

Russian

Abstract

Nitrating $\text{o-H}_2\text{OC}_6\text{H}_4\text{C}_6\text{H}_4\text{CO}_2\text{H}$ with $\text{HNO}_3\text{-H}_2\text{SO}_4$ at 160° gave 90% I, which was hydrogenated over Raney Ni in DMF to give 80-9% II (R = NH₂). Desulfonation of II (R = NH₂) followed by treatment with hypophosphorous acid gave 66% III (R = H). II (R = Cl, Br, iod, CN, NHAc, OH, OAc, NO₂) were prepared in 73-68% yield similarly.

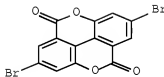
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CAS Registry Number

71542-23-9 CAPLUS

Chemical or Trade Name

[1]benzopyrreno[5,4,3-cde][1]benzopyrren-5,10-dione, 2,7-dibromo- (9CI) (CA: 23026X 30865)



L7 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number 1972339956 CAPLUS [Full text](#)

Document Number 77139956

Title

Facile synthesis of 2,3-dihydroimidazo[1,2-b]pyridine and 1,2,3,4-tetrahydropyrimido[1,2-b]phenanthridines

Author/Inventor

Pao, Hsi-Lung; Fletcher, T. Lloyd

Patent Assignee/Corporate Source

Sch. Med. Univ. Washington, Seattle, WA, USA

Source

Journal of Heterocyclic Chemistry (1972), 9(4), 899-64 CODEN: JHCTAD, ISSN: 0022-132X

Document Type

Journal

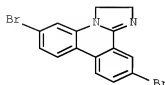
Language
English

Abstract
When 6-(2-hydroxyethyl)amino-6-(3-hydroxypropyl)amino- or 6-[2-(1-hydroxybutyl)amino]phenanthridines, dissolved in concentrated H₂SO₄, were treated with nitrosylsulfuric acid at 0-25°, then diluted with H₂O and basified with aqueous NaOH at 60-80°, 2,3-dihydroindazo-, 1,2,3,4-tetrahydroindazo-, or 2,3-dihydro-2-ethylindazo[1,2-f]phenanthridines (I, II, and III; R¹ = H, Cl, NO₂; R² = H, Cl, Br; R³ = H, Cl, Br) were obtained resp. in good yields. Structures were substantiated by π spectroscopy. The 6- α -hydroxyalkylamino phenanthridines were prepared from the 6-chlorophenanthridines. A possible mechanism for the formation of these ring systems is postulated.

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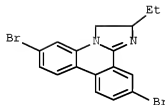
CAS Registry Number
37993-13-5 CAPLUS

Chemical or Trade Name
Indazo[1,2-f]phenanthridine, 6,11-dibromo-2,3-dihydro- (CA INDEX NAME)



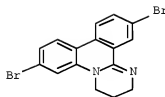
CAS Registry Number
37994-68-6 CAPLUS

Chemical or Trade Name
Indazo[1,2-f]phenanthridine, 6,11-dibromo-2-ethyl-2,3-dihydro- (CA INDEX NAME)



CAS Registry Number
38185-11-2 CAPLUS

Chemical or Trade Name
2H-Pyrido[1,2-f]phenanthridine, 7,12-dibromo-3,4-dihydro-, hydrobromide (2:1) (CA INDEX NAME)



● HBr

L7 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2009 ACS an STN

Accession Number
1968 104896 CAPLUS Fulltext
Document Number
68 104896

Title
Persulfate oxidation of carboxylic acids. III. Oxidation of cis-cinnamic and biphenyl-2-carboxylic acids

Author/Inventor
Brown, Patricia Margaret; Russell, James; Thomson, Ronald H.; Wylie, A. G.
Patent Assignee/Corporate Source
Univ. Aberdeen, Aberdeen, UK

Source
Journal of the Chemical Society [Section] C: Organic (1968), (7), 842-8 CODEN JCSOAX, ESRN 0022-4952

Document Type
Journal
Language
English

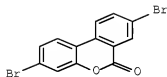
Abstract

3,4-Benzocoumarins were obtained by oxidative cyclization of biphenyl-2-carboxylic acids. The parent benzocoumarin was also formed by oxidation of 2'-substituted acids with elimination of the substituent (OMe, HCO₂ and CO₂H) and in low yield Me and Cl) but 2'-benzoylbiphenyl-2-carboxylic acid gave 3-benzyl-3,4-benzocoumarin and 2'-cyanobiphenyl-2-carboxylic acid yielded fluorenone and phenethylidene-1,10-carbolactone. Similar oxides of *o*-aminic acids gave poor yields of coumarins, markedly increased by the presence of an *o*-methoxy group. The mechanisms of these reactions are discussed. 47 references.

HR Structure

CAS Registry Number
15110-99-3 COUMARIN

Chemical or Trade Name
6*o*-Dibromo(1*h*,5*pyran*-6-one, 3,8-dibromo- ICA INDEX NAME)



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 / Structure 236 in File .qta /

Structure attributes must be viewed using STN Express query preparation

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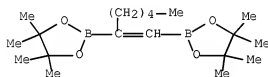
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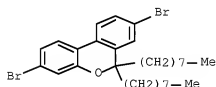
Author/Inventor
 6H-Chloros[2,4]pyran, 3,8-dibromo-6,6-diethyl, polymer with 2,2'-(1-pentyl-1,2-ethenediyl)bis[4,4,5,5-tetramethyl-1,3,2-dioxaborolane]

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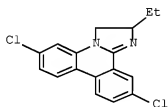
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L8 4 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

Author/Inventor
 Imidazo[1,2-g]phenanthridine, 6,11-dichloro-2-ethyl-2,3-dihydro-

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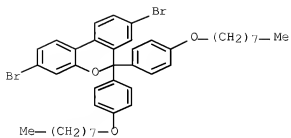
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L8 4 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

Author/Inventor
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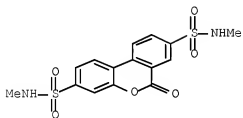
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 Author/Inventor
 INDEX NAME NOT YET ASSIGNED
 Hrt DrugLife



PROPERTY DATA AVAILABLE IN THE "PROP" FORMAT

ALL ANSWERS HAVE BEEN SCANNED

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L12 ANSWER 1 OF 12 CAPLUG COPYRIGHT 2006 ACS on STN

Accession Number
 2006-653771 CAPLUG Fulltext

Document Number
 145 124966

Title
 Polymer compound and its use in heat-resistant polymer light-emitting device
 Author/Inventor
 Kobayashi, Shigeyo; Kobayashi, Satoshi

Patent Assignee/Corporate Source
 Sumitomo Chemical Company, Limited, Japan
 Source
 PCT Int. Appl. 154 pp CODEN: PXXXX

Document Type
 Patent

Language
 Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004070848	A1	20040704	WO 2005-092401.1	20051221
JP 2004182920	A	20040713	JP 2004-378517	20041229
GB 243721.3	A	20071017	GB 2007-14555	20051221
DE 112005003270	T5	20060410	DE 2005-112005003270	20051221
US 20040145571	A1	20040619	US 2007-722225	20070620
KR 2007090041	A	20070904	KR 2007-717119	20070725
CN 101124259	A	20060213	CN 2005-80049421	20070617

Abstract

Disclosed is a polymer compound characterized by containing a structure represented by the following formula I (ring A and ring B independently represent an optionally substituted aromatic hydrocarbon ring, and ring C represents an alkydic hydrocarbon which contains no fused aromatic compound while having at least one substituent; the alkydic hydrocarbon may contain a heteroatom).

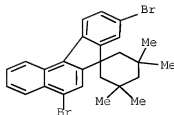
HE Structure

CAS Registry Number
 896732-77-7 CAPLUG

Chemical or Trade Name
 6,6'-dibromo-3,3',5,5'-tetrakis(3,5-dibromo-6,6'-diethyl- polymer with
 3,5-dibromo-3',5',5'',5'''-tetramethylspiro[70]benzo[c]fluorene-7,1'-
 cylobutane)] (SCT) (CA 2006 0006)

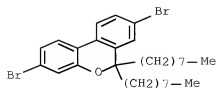
CN
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CHE 896732-73-3
 CHE C26 H26 Br2



CN
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CHE 888013-66-3
 CHE C29 H40 Br2 O



L12 ANSWER 2 OF 12 CAPLUG COPYRIGHT 2008 ACS on STN
 Accession Number
 2008-89891 CAPLUG Pub. Text
 Document Number
 144-172274

Title
 Polymeric compounds for thin polymer film devices
 Author/Inventor
 Ueda, Masato
 Patent Assignee/Corporate Source
 Sumitomo Chemical Company, Limited, Japan

Source
 PCT Int. Appl., 72 pp. CODEN: POCXDE

Document Type
 Patent

Language
 Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004011643	A1	20040222	WO 2005-37141.56	20050727
JP 2004063334	A	20040309	JP 2005-217025	20050727
DE 112005001823	T5	20070624	DE 2005-112005001823	20050727
GB 2432837	A	20070404	GB 2007-3468	20050727
GB 2432837	B	20080620		
CN 1999149	A	20070427	CN 2005-8025103	20050727
US 20080009422	A1	20080103	US 2007-072519	20070123
KR 2007047314	A	20070504	KR 2007-704334	20070223

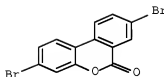
Abstract

The polymeric compts with number average mol. weight 103-198 comprise repeating units I and II, wherein Ar1, Ar2 = independently trivalent aromatic hydrocarbon group or trivalent heterocyclic group, X1, X2 = independently O, S, C(=O), Si(O), or SO2 (X1 = X2), Y = C or Si, R8 = halogen, allyl, or alkyl; m = 0 or 1; n, o = 1-6 integer, and p = 0-2 integer. Thus, 6.60 g 2,7-dibromofluorene was dissolved in 140 mL 1:1 mixture of trifluoroacetic acid/trichloroform, sodium peroxide monohydrate was added therein, stirred for 20 h, 1.60 g of the resulting 3,5-dibromo-4H-dibenzofuran-6-one was stirred with triethyl magnesium bromide (mixed with p-toluenesulfonic acid monohydrate, and reacted with bis(pinacolato)diboron to give 6,6-dicyclo-3,5-bis(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)-4H-dibenzofuran, 0.62 g of which was reacted with 0.29 g 5,5-dibromo-2-thiophene in the presence of tetraakis(phenylphosphine)potassium for 16.3 h to give a copolymer. 0.2% solution of the resulting copolymer in chloroform was applied on a poly(3,4-ethylenedioxythiophene) polytetrafluoroethylene acid-coated ITO-glass plate, lithium fluoride, calcium, and aluminum were deposited thereon in this order to give a thin film device, showing short-circuit current 43 μ A/cm² and open circuit voltage 1.75 V.

HR Structure

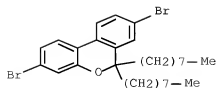
CAS Registry Number
 107102-99-3 CAPLUG

Chemical or Trade Name
 6,6-Dibromo-3,5-bis(phenyl-6-one, 3,5-dibromo- (CA INDEX NAME)



CAS Registry Number
 688053-66-3 CAPLUG

Chemical or Trade Name
 6,6-Dibromo-3,5-bis(phenyl-6-one, 3,5-dibromo-6,6-diethyl- (CA INDEX NAME)



L12 ANSWER 3 OF 12 CAPLUG COPYRIGHT 2008 ACS on STN
 Accession Number
 2008-524209 CAPLUG Pub. Text
 Document Number
 142-374970

Title
 Polymer light-emitting material and polymer light-emitting device

Nakatani, Tomoya, Sekine, Chizu, Mikami, Satoshi, Kobayashi, Satoshi
Patent Assignee/Corporate Source
Sumitomo Chemical Company, Limited, Japan

Document Type

Language
Japanese

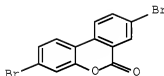
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NO 20050331174	A1	20050414	NO 2004-1714549	20040928
DE 1120040101856	DE	20040727	DE 10-12004011856	20040928
GB 2424895	A	20041011	GB 2004-1519	20040928
GB 2424895	B	20080709		
CN 1863838	A	20041115	CN 2004-60028951	20040928
JP 2005124705	A	20050519	JP 2004-286413	20040930
US 20070019122	A1	20070304	US 2004-573839	20060329
KR 2006115861	A	20061110	KR 2006-708210	20060428

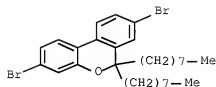
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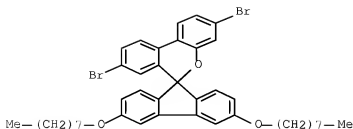
Chemical or Trade Name
6H-Dibenzo[b,d]pyran-6-one, 3,8-dibromo- ICA INDEX NAME:



Chemical or Trade Name
6H-Dibenzo[b,d]pyran, 3,8-dibromo-6,6-dioctyl- (CA INDEX NAME)



Chemical or Trade Name
Spiro[6H-dibenzo[b,d]pyran-6,9'-[9H]fluorene],
3,8-dibromo-3',6'-bis(octyloxy)- (CA INDEX NAME)

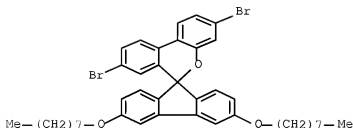


CAS Registry Number
849693-36-7 CAP126

Chemical or Trade Name
Spiro[6H-dibenzo[b,d]pyran-6,9'-(9H)fluorene],
3,8-dibromo-3',6'-bis(octyloxy)-, polymer with
3,8-dibromo-6,6'-dioctyl-6H-dibenzo[b,d]pyran (9CI) (CA INDEX NAME)

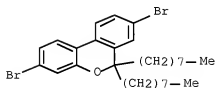
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CMF C41 B46 Bc2 O3
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CX

CPH 688013-66-3
CMT C29 H40 Br2 O



L12 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
2005 324147 CAPLUS EMI-2005

Document Number
142-392812

Title
.....

Aromatic compounds having condensation

Author/Inventor
Kobayashi, Satoshi; Mikami, Satoshi

Patent Assignee/Corporate Source

Sumitomo Chemical Company, Limited,
Source:

Source: PCT Int. Appl., 91 pp. CODEN: PXXD2

Document Type

Patent

Language
Japanese

Patent Information

PATENT NO	KIND	DATE	APPLICATION NO	DATE
WO 2005033090	A1	20050414	WO 2004-JP15001	20041005
JP 2005132829	A	20050526	JP 2004-292337	20041005
US 20070063190	A1	20070322	US 2006-574563	20060404

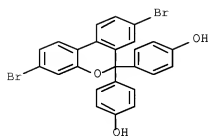
Abstract

The present invention relates to aromatic compounds I, II, III, and IV, wherein Ar1, Ar3 = trivalent aromatic hydrocarbon or trivalent heterocyclic group; Ar2, Ar4, Ar5, Ar7 = bivalent aromatic hydrocarbon or bivalent heterocyclic group; Ar6, Z1, Z2, Z3 or Z4, Z5, Z6 or O or S, Z4, Z5, N = B, or P, and X1, X2, X3, X4, X9, X10, X11, X12 = halogen atom. Thus, 7,0 g of 2,2'-di-*n*-butylterphenyl-1,1'-biphenyl was reacted with 8.8 g *N*-chlorosuccinimide, treated with boron tribromide, 4.8 g of the resulting 4,4'-dichloro-2,2'-di-*n*-butylterphenyl-1,1'-biphenyl was treated with *o*-dichlorobenzene for 13 h to give 3,3'-dichloro-2,2'-dibenzoterphenyl.

Hit Structure

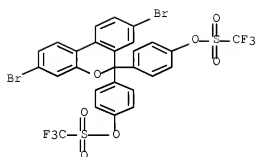
CAS Registry Number
849693-50-1 CAPL/02

Chemical or Trade Name
 Phenol, 4,4'-(3,5-dibromo-6H-dibenzo[b,d]pyran-6-ylidene)bis- (9CI) (CA
 INDEX NAME)



CAS Registry Number
 645031-31-2 (EPLI)

Chemical or Trade Name
 Methanesulfonyl acid, trifluoro-, (3,5-dibromo-6H-dibenzo[b,d]pyran-6-ylidene)bis-, 4,4'-phenylene ester (9CI) (CA INDEX NAME)



Accession Number
2004-091002 CAPLUS File-tn
Document Number
140.415047

Title
High-molecular compounds and polymer light-emitting devices made by using the same

Author/Inventor
Dai, Shuji; Kobayashi, Satoshi; Noguchi, Takamasa
Patent Assignee/Corporate Source
Sumitomo Chemical Company, Limited, Japan

Source
PCT Int Appl, 131 pp CODEN: PIKX02

Document Type
Patent

Language
Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004039459	A1	20040513	WO 2003-JP12697	20031003
JP 2004149999	A	20040617	JP 2003-343244	20031001
AU 2003248752	A1	20040525	AU 2003-268750	20031003
EP 1571170	A1	20050907	EP 2003-744697	20031003
US 20040134652	A1	20040612	US 2003-532937	20030428

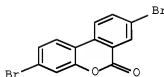
Abstract

The invention relates to a high-mol. compds. comprising repeating units represented by the general formula I or II and having number-average mol. wts. of 100-100 in terms of polystyrene. (1) [wherein Ar1 and Ar2 are each independently a trivalent aromatic hydrocarbon group or a trivalent heterocyclic group, and X1 and X2 are each independently O, S, C(=O), Si(=O), Ge(=O), CR1(R2), Si(R3)(R4), N(R5), B(R6), P(R7), or P(=O)(R8), with the proviso that X1 and X2 must not be the same and that X1 and Ar2 are bonded resp. to the adjacent carbon atoms constituting the aromatic ring of Ar1, and X2 and Ar1 are bonded resp. to the adjacent carbon atoms constituting the aromatic ring of Ar2] (2) [wherein Ar3 and Ar4 are each independently a trivalent aromatic hydrocarbon group or a trivalent heterocyclic group, and X3 and X4 are each independently N, B, P, C(R9), or Si(R10), with the proviso that X3 and X4 must not be the same and that X3 and Ar4 are bonded resp. to the adjacent carbon atoms constituting the aromatic ring of Ar3, and X4 and Ar3 are bonded resp. to the adjacent carbon atoms constituting the aromatic ring of Ar4]

HE Structure

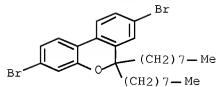
CAS Registry Number
15100-99-3 CAPLUS

Chemical or Trade Name
6,8-Dibromo[6,3]pyran-6-one, 3,8-dibromo- (CA INDEX NAME)



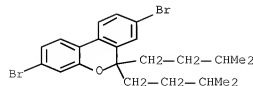
CAS Registry Number
680033-66-3 CAPLUS

Chemical or Trade Name
6,8-Dibromo[6,3]pyran, 3,8-dibromo-6,6-diethyl- (CA INDEX NAME)



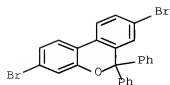
CAS Registry Number
680033-68-5 CAPLUS

Chemical or Trade Name
6,8-Dibromo[6,3]pyran, 3,8-dibromo-6,6-bis(3-methylbutyl)- (CA INDEX NAME)



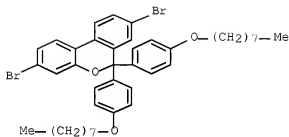
CAS Registry Number
680033-68-5 CAPLUS

Chemical or Trade Name
6,8-Dibromo[6,3]pyran, 3,8-dibromo-6,6-diphenyl- (CA INDEX NAME)



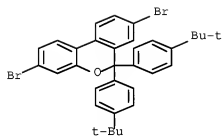
CAS Registry Number
670213-69-6 (CA1306)

Chemical or Trade Name
6b-Dibenzospiro[5.5]pyrene, 3,9-dibromo-6,6-bis[4-(octyloxy)phenyl]- (CA INDEX NAME)



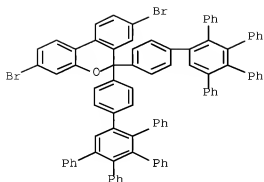
CAS Registry Number
688023-10-9 (CA1310)

Chemical or Trade Name
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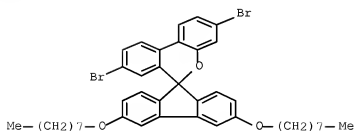
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688023-11-9 (CA1310)

Chemical or Trade Name
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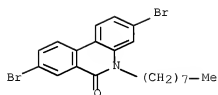
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Chemical or Trade Name
Spiro[6,6]dibenzos[1,2-d:4,5-d']pyran-6,9'-[9H]fluorene,
3,9-dibromo-3',6'-bis(octyloxy)- (CA INDEX NAME)



CAS Registry Number
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Chemical or Trade Name
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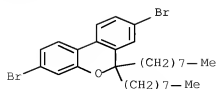


CAS Registry Number
688013-70-7 CAPI/5

Chemical or Trade Name
6H-Dibenzos[1,2-d:4,5-d']pyran, 3,9-dibromo-6,6-diethyl-, homopolymer (SCI) (CA
INDEX NAME)

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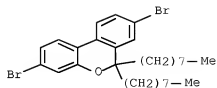
CAS Registry Number

688013-79-0 CAS#1/0

Chemical or Trade Name
48-Dibromo(b,d)pyran, 3,9-dibromo-6,6-diethyl-, polymer with
1,4-dibromo-2,5-bis(isopropoxy)benzene (PCT) (CA INDEX NAME)

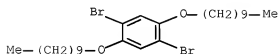
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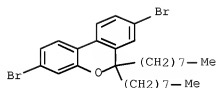


CAS Registry Number
688013-90-1 CAS#1/0

Chemical or Trade Name
48-Dibromo(b,d)pyran, 3,9-dibromo-6,6-diethyl-, polymer with
3,7-dibromo-2,5-bis(isopropoxy)dibenzothiophene (PCT) (CA INDEX NAME)

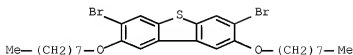
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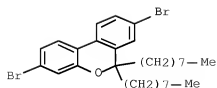


CAS Registry Number
688013-81-2 CAS#1/0

Chemical or Trade Name
48-Dibromo(b,d)pyran, 3,9-dibromo-6,6-diethyl-, polymer with
3,7-dibromo-2,5-bis(isopropoxy)dibenzofuran (PCT) (CA INDEX NAME)

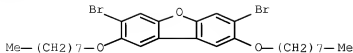
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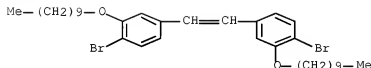


CAS Registry Number
689013-33-4 CAS1/8

Chemical or Trade Name
4,4'-Dibromo-2,2'-bipyren-3,9-dibromo-6,6'-diethyl-, polymer with
1,1'-[(1,2-ethanediylo)bis[4-bromo-3-(decyloxy)benzene]] (PCL) (CA INDEX
NAME)

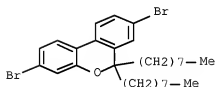
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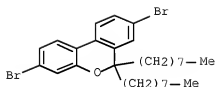


CAS Registry Number
689013-34-5 CAS1/8

Chemical or Trade Name
Benzonamine, N,N-bis(4-bromophenyl)-4-(1-methylpropyl)-, polymer with
3,9-dibromo-6,6'-diethyl-2,2'-bipyren-3,9-dibromo-6,6'-diethylpyran (PCL) (CA INDEX NAME)

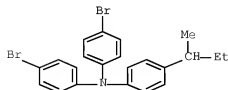
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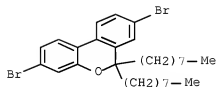


CAS Registry Number
688013-65-6 CAS1/03

Chemical or Trade Name
1,4-benzenediamine, N,N'-bis[4-bromophenyl]-N,N'-bis[6-(4-butylphenyl)-, polymer with 3,8-dibromo-6,6-dioctyl-2H-dibenzo[b,d]pyran (9CI) (CA INDEX NAME)

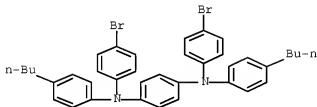
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CN 2

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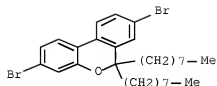


CAS Registry Number
688013-65-6 CAS1/03

Chemical or Trade Name
1,4-benzenediamine, N,N'-bis[4-bromophenyl]-N,N'-bis[6-(4-butylphenyl)-, polymer with 3,8-dibromo-6,6-dioctyl-2H-dibenzo[b,d]pyran (9CI) (CA INDEX NAME)

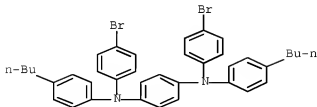
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CFR 688013-66-3
CMF C29 H40 Br2 O



CN 2

CFR 372300-09-0
CMF C38 H39 Br2 N2



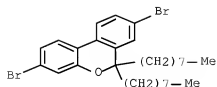
CAS Registry Number
688013-66-7 CAS1/03

Chemical or Trade Name
1,4-benzenediamine, N,N'-bis[4-bromophenyl]-N,N'-bis[6-(4-butylphenyl)-, polymer with 3,7-dibromo-2,8-bis(octyloxy)dibenzothioophene and

3,8-dibromo-6,6-diisopropyl-6H-dibenzo[b,d]pyran (9C1) (CA INDEX NAME)

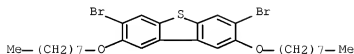
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CHN 688013-66-3
CMF C29 H40 Br2 O



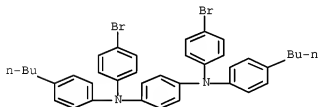
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CHN 599212-67-6
CMF C28 H18 Br2 O2 S



CM 3

CHN 372320-89-0
CMF C30 H18 Br2 N2

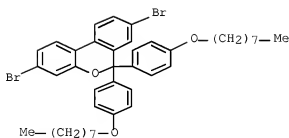


CAS Registry Number
688013-87-0 CAPI/G

Chemical or Trade Name
6H-Dibenzo[b,d]pyran, 3,8-dibromo-6,6-bis[4-(isopropoxy)phenyl]-,
homopolymer (9C1) (CA INDEX NAME)

CM 1

CHN 688013-69-6
CMF C41 H48 Br2 O3

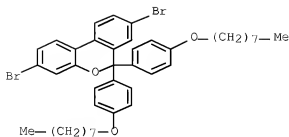


CAS Registry Number
688013-88-0 CAPI/G

Chemical or Trade Name
1,4-Benzenediamine, N,N'-bis[4-bromophenyl]-N,N'-bis[4-(isopropoxy)phenyl]-,
polymer with 3,8-dibromo-6,6-bis[4-(isopropoxy)phenyl]-6H-dibenzo[b,d]pyran
(9C1) (CA INDEX NAME)

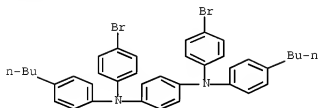
CM 1

CHN 688013-69-6
CMF C41 H48 Br2 O3



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CIN 372210-89-0
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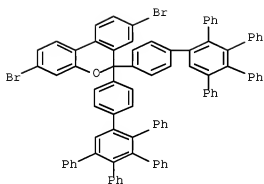


CAS Registry Number
680013-09-0 CASLOG

Chemical or Trade Name
6,6-Dibromo-2,2'-bipyridine, 3,3'-bis(3',4',5'-triphenyl[1,1'-biphenyl]-4-yl)-, homopolymer (PCT) (CA INDEX NAME)

CN
1

CIN 680013-71-0
CNP C35 H36 Br2 O

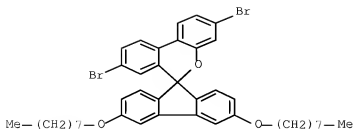


CAS Registry Number
680013-90-3 CASLOG

Chemical or Trade Name
6,6-Dibromo-2,2'-bipyridine, 3,3'-bis(3',4',5'-triphenyl[1,1'-biphenyl]-4-yl)-, homopolymer (PCT) (CA INDEX NAME)

CN
1

CIN 680013-72-1
CNP C42 H46 Br2 O3



L12 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN
 Accession Number
 1991143456 CAPLUS [Full Text](#)
 Document Number
 114143456

Title
 Preparation and formulation of (heterocycloalkylthio)thiazolo[4,3-b]benzodiazepines and thieno[3,2-b][1,2,4] triazolo [4,3-a][1,4] diazepines and analogs as platelet activating factor antagonists

Author/Inventor
 Wasser, Armin
 Patent Assignee/Corporate Source
 Hoffmann-La Roche, Inc, USA

Source
 U.S., 52 pp. Cont-n part of U.S. Ser. No. 227,848, abandoned. CODEIN: USXXAM

Document Type
 Patent

Language
 English

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4959361	A	19900925	US 1988-252964	19881003
SA 8829116	A	19890830	SA 1988-9216	19881205
CA 1327570	C	19940308	CA 1988-585993	19881215
DK 8807040	A	19890619	DK 1988-7040	19881216
FI 885820	A	19890619	FI 1988-5820	19881216
FI 88799	B	19930331		
FI 88799	C	19930712		
AU 8826989	A	19890629	AU 1988-26989	19881216
AU 812441	B2	19910711		
JP 01197484	A	19890809	JP 1988-314555	19881216
JP 07025762	B	19950322		
NO 50823	A2	19900328	NO 1988-4449	19881216
HU 204273	B	19911230		
NO 167920	B	19910916	NO 1988-5597	19881216
NO 167920	C	19911227		
SE 2056889	T3	19941016	SE 1988-121165	19881216
NO 2071962	C1	19970120	NO 1988-461319	19881216
CN 1034722	A	19890816	CN 1988-106697	19881217
CN 1031057	C	19960221		
NO 2094436	C1	19971027	NO 1992-5010494	19920131

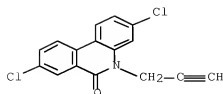
Abstract

The title compounds (I) R1 = alkyl, alkoxy, CF3; R2 = H, alkyl, alkoxy, OH, AcO; R3, R4 = H, Cl, F, alkyl, alkoxy; R5 = R6(CHE)mC1 (bonded C, R7 = methyl, heterocycloalkyl, X = CH, CH2, S, m = 1, 2, n = 0-2, s = 0, 1) were prepared. Thus, (I) R1 = Me, R2 = Et, R3 = Et, R4 = C-Cl, R5 = n-octyl, X = S, s = 0) was stirred 10 h with R6(CHE)mC1 (bonded C, R7 = tetraethylcarbamoyl group (C1)) in DMF containing Et3N, CuI, Ph3P, and Pd(OAc)2 to give (I) R6 = C1 (bonded CCH2O, R1, R2, R3, R4, X, s = same as above) which had IC50 of 0.006 mg/kg orally against platelet activating factor-induced bronchoconstriction in guinea pigs.

HS Structure

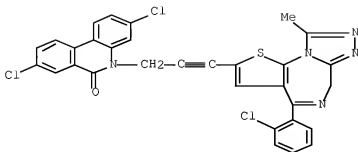
CAS Registry Number
 125031-29-0 CASP175

Chemical or Trade Name
 61501-Fluoranthene-1,2,3,4-tetracarboxylic diimide, 3,8-dichloro-5-(2-propenyl-1-yl)- (CA INDEX NAME)



CAS Registry Number
125030-91-3 CAPLUS

Chemical or Trade Name
6-[5(8)-Phenanthridinone, 3,8-dichloro-5-[3-[4-(2-chlorophenyl)-9-methyl-6H-thieno[3,2-f][1,2,4]triazolo[4,3-a][1,4]diazepin-2-yl]-2-propyn-1-yl]-
(CA INDEX NAME)



L12 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN

Accession Number
1991122305 CAPLUS Publist
Document Number
114 122305

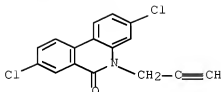
Title
Thiazobenzotriazolothienodiazepines as potent antagonists of platelet activating factor
Author/Inventor
Waser, Amin, Flynn, Thomas, Mason, Carl, Crowley, Herman, Marengo, Catherine, Yarembko, Bob, O'Donnell, Margaret
Patent Assignee/Corporate Source
Roche Res. Cent., Hoffmann-La Roche, Inc., Nutley, NJ 07110, USA
Source
Journal of Medicinal Chemistry (1991), 34(3), 1209-21 CODEN JMCMAH, ISSN: 0022-2625
Document Type
Journal
Language
English
Abstract

A series of [7,2-dihydro[4,3-*cd*]1,4-benzodiazepines bearing an ethynyl functionality at the 5-position and the esteric thieno[3,2-*f*]1,2,4-triazolo[4,3-*ab*]1,4-diazepines, e.g. I and II, were prepared and evaluated as antagonists of platelet activating factor (PAF). The effects of substitution were explored *in vitro* and *in vivo* test systems designed to measure PAF-antagonistic activity. The thieno analogs exhibited better oral activity than the corresponding benzodiazepines. The duration of activity upon oral administration was modulated by the substitution on the acetylenic side chain. Thiazobenzodiazepines II and III were selected for further pharmacol. evaluation as a result of their good oral potency and exceptionally long duration of action.

HR Structure

CAS Registry Number
125031-29-0 CAPLUS

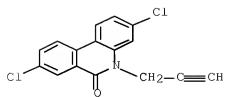
Chemical or Trade Name
6-[5(8)-Phenanthridinone, 3,8-dichloro-5-[2-propyn-1-yl]-
(CA INDEX NAME)



CAS Registry Number
125030-91-3 CAPLUS

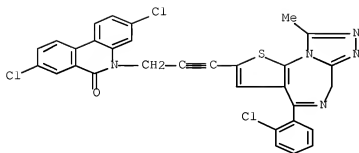
Chemical or Trade Name
6-[5(8)-Phenanthridinone, 3,8-dichloro-5-[3-[4-(2-chlorophenyl)-9-methyl-6H-thieno[3,2-f][1,2,4]triazolo[4,3-a][1,4]diazepin-2-yl]-2-propyn-1-yl]-
(CA INDEX NAME)

6-(5H)-Phenanthradione, 3,8-dichloro-5-(2-propenyl)- (CA INDEX NAME)



CAS Registry Number
120530-91-3 CAP105

Chemical or Trade Name
6-[5H]-benzo[1,2-b:4,5-b']quinoxaline-2-one, 3,8-dichloro-5-[3-(4-(2-chlorophenyl)-9-methyl-6H-thieno[3,2-f][1,3,4]oxadiazolo[4,3-a][1,6]diazepin-2-yl)-2-propyn-1-yl]-
(CA, INECC NAME)



L12 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number

1982 110888 CAPLUS [Fulltext](#)

Document Number

92 110888

Title

Studies of phenanthridone and tetrahydrodiazapyrene 2: Synthesis of 2,7-diamino-5,10-dioxo-4,5,9,10-tetrahydro-4,9-diazapyrene and its derivatives

Author/Inventor

Mogachev, G. I.; Terent'ev, A. M.; Usoid, V. I.

Patent Assignee/Corporate Source

Nauchno-Issled. Inst. Plast. Mass, Moscow, 111192, USSR

Source

Khimiya Geterotsiklicheskikh Soedinenii (1979), (12), 1672-7 CODEN: KHOSQA; ISSN: 0453-8234

Document Type

Journal

Language

Russian

Abstract

Treatment of apd I with CrCl₃ gave 61% diazapyrene II (R = NH₂), whereas the hydrogenation of I over Ni gave 88% III (R = NH₂). II (R = NH₂) was refluxed with Ac₂O to give 91% IV (R = H). IV (R = Ac) could not be obtained from II (R = NH₂) or IV (R = H) but was obtained from I via reduction to the tetramine. II (R = H, Cl, Br, I, CN, NO₂, OH) were prepared in 84-91% yield from II (R = NH₂), e.g., by diazotization. III (R = H, Cl, Br, I, CN, OH) were also prepared in 80-92% yield.

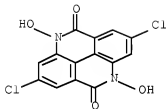
HR Structure

CAS Registry Number

72979-17-0 CAPLUS

Chemical or Trade Name

Pyrido[2,3-f,4,5-j]phenanthridine-5,10-dione,
2,7-dichloro-4,9-dihydro-4,9-diazapyren- (CA, INDEX NAME)

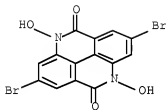


CAS Registry Number

72979-18-1 CAPLUS

Chemical or Trade Name

Pyrido[2,3-f,4,5-j]phenanthridine-5,10-dione,
2,7-dibromo-4,9-dihydro-4,9-diazapyren- (CA, INDEX NAME)



L12 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number

1979 840744 CAPLUS [Fulltext](#)

Document Number

91 140744

Title

Synthesis of 2,7-disubstituted 5,10-dioxo-4,5,9,10-tetrahydro-4,9-diazapyrenes

Author/Inventor

Mogachev, G. I.

Patent Assignee/Corporate Source

Nauchno-Issled. Inst. Plast. Mass, Moscow, USSR

Source

Zhurnal Vsesoyuznogo Khimicheskogo Obshchestva im. D. I. Mendeleeva (1979), 24(3), 307-8 CODEN: ZVHOAE; ISSN: 0373-0247

Document Type

Journal

Language

Russian

Abstract

Nitrating o-HOCC₆H₄CH₂COOH with HNO₃-H₂SO₄ at 160° gave 90% I, which was hydrogenated over Raney Ni in DMF to give 80-9% II (R = NH₂). Diazotization of II (R = NH₂) followed by treatment with hypophosphorous acid gave 86% III (R = H). II (R = Cl, Br, Iodo, CN, NHAc, OH, OMe, NO₂) were prepared in 73-88% yield similarly.

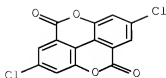
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CAS Registry Number

72540-28-8 CAPLUS

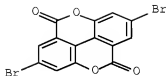
Chemical or Trade Name

[1]Benzopyreno[5,4,3-cde][1]benzopyrene-5,10-dione, 2,7-dichloro- (SCI)
(CA, INDEX NAME)



CAS Registry Number
71540-93-9 CAPLUS

Chemical or Trade Name
[1,2]benzopyrimono[5,4,3-cde][1,1]benzopyrim-5,10-dione, 2,3-dibromo- (9CI) (CA INDEX NAME)



L12 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number
1972-53996 CAPLUS E(1)(10)
Document Number
77-139556

Title
Facile synthesis of 2,3-dihydromidazo- and 1,2,3,4-tetrahydropyrimido[1,2-a]phenanthridines

Author(s)
Pan, Hsi-Lung; Fletcher, T. Lloyd

Patent Assignee/Corporate Source
Son. Med. Univ. Washington, Seattle, WA, USA

Source
Journal of Heterocyclic Chemistry (1973), 9(4), 859-64 CODEN JHCTAD; ISSN 0022-192X

Document Type
Journal

Language
English

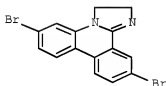
Abstract

When 6-(2-hydroxyethyl)amino-, 6-(3-hydroxypropyl)amino-, or 6-[2-(1-hydroxybutyl)amino]phenanthridines, dissolved in concentrated H₂SO₄, were treated with nitric/sulfuric acid at 0-25°, then diluted with H₂O and basified with aqueous NaOH at 65-85°, 2,3-dihydromidazo-, 1,2,3,4-tetrahydropyrimido-, or 2,3-dihydro-2-ethylimidazo[1,2-a]phenanthridines (I, II, and III, R¹ = H, Cl, HCO₂, R² = H, Cl, Br, R³ = H, Cl, Br, NC₂, NH₂, R⁴ = H, Cl, Br) were obtained resp. in good yields. Structures were substantiated by x spectroscopy. The 6-alkoxyalkylamino-phenanthridines were prepared from the 6-phenanthridines. A possible mechanism for the formation of these ring systems is postulated.

Hit Structure

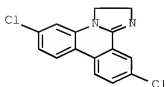
CAS Registry Number
37592-13-5 CAPLUS

Chemical or Trade Name
Imidazo[1,2-f]phenanthridine, 6,11-dibromo-2,3-dihydro- (CA INDEX NAME)



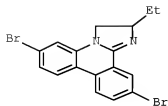
CAS Registry Number
37592-14-6 CAPLUS

Chemical or Trade Name
Imidazo[1,2-f]phenanthridine, 6,11-dichloro-2,3-dihydro- (CA INDEX NAME)



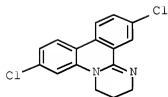
CAS Registry Number
37994-09-6 CASLOS

Chemical or Trade Name
Indeno[1,2-f]phenanthridine, 6,11-dibromo-2-ethyl-2,3-dihydro- (CA INDEX NAME)



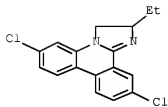
CAS Registry Number
37994-14-4 CASLOS

Chemical or Trade Name
Zetpyrindole[1,2-f]phenanthridine, 7,12-dichloro-3,4-dihydro- (CA INDEX NAME)



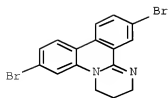
CAS Registry Number
39182-10-1 CASLOS

Chemical or Trade Name
Indeno[1,2-f]phenanthridine, 6,11-dichloro-2-ethyl-2,3-dihydro- (CA INDEX NAME)



CAS Registry Number
18182-12-2 CASLOS

Chemical or Trade Name
Zetpyrindole[1,2-f]phenanthridine, 7,12-dibromo-3,4-dihydro-, hydrobromide (1:1) (CA INDEX NAME)



● HBr

L12 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN

Accession Number

1968 104896 CAPLUS [Fid-bm](#)

Document Number

68 104896

Title

Persulfate oxidation of carboxylic acids. II. Oxidation of *o*-cinnamic and biphenyl-2-carboxylic acids

Author/Inventor

Brown, Patricia Margaret, Russell, James, Thomson, Ronald H., Wyke, A. G.

Patent Assignee/Corporate Source

Univ. Aberdeen, Aberdeen, UK

Source

Journal of the Chemical Society [Section] C: Organic (1968), (7), 842-8 CODEN J500AX, ESI9 6022-4992

Document Type

Journal

Language

English

Abstract

3,4-Benzocoumarins were obtained by oxidative cyclization of biphenyl-2-carboxylic acids. The parent benzocoumarin was also formed by oxidation of 2'-substituted acids with elimination of the substituent (OMe, HCO₂, and CO₂H) and in low yield Me and Cl) but 2'-benzoylbiphenyl-2-carboxylic acid gave 5-benzoyl-3,4-benzocoumarin and 2'-cyanobiphenyl-2-carboxylic acid yielded fluorenone and phenanthridine-1,10-carbolactone. Similar oxides of *o*-cinnamic acids gave poor yields of coumarins, markedly increased by the presence of an *o*-methoxy group. The mechanisms of these reactions are discussed. 47 references.

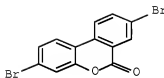
HR Structure

CAS Registry Number

10102-99-3 CASL03

Chemical or Trade Name

68-Dibenzol(b,d)pyran-6-one, 3,8-dibromo- (CA INDEX NAME)



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ALL L4 QUERIES AND ANSWER SHEETS ARE DELETED AT LOGOFF
LOGOFF (Y/N/MSG)?

(FILE 'HOME' ENTERED AT 13:40:13 ON 12 MAY 2009)

FILE 'REGISTRY' ENTERED AT 13:46:03 ON 12 MAY 2009
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L2 D L1
L3 1 SEA FILE=REGISTRY SSS SAM L1
L4 D SCIN
L5 STRUCTURE UPLOADED
L6 D L3
L7 2 SEA FILE=REGISTRY SSS SAM L3
L8 D SCIN
L9 35 SEA FILE=REGISTRY SSS FUL L3

FILE 'CAPUS' ENTERED AT 13:48:51 ON 12 MAY 2009
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    AYC=2004 OR PRC=2004)
L11 9 SEA FILE=CAPUS SPS=ON ASB=ON FLD=ON L5/FRFP AND (FTC=2004
    OR AYC=2004 OR PRC=2004)
L12 D IRIS AND RUTTS 1-

FILE 'REGISTRY' ENTERED AT 13:04:39 ON 12 MAY 2009
L13 STRUCTURE UPLOADED
L14 D L8
L15 4 SEA FILE=REGISTRY SSS SAM L8
L16 D SCIN
L17 75 SEA FILE=REGISTRY SSS FUL L8

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L19 12 SEA FILE=CAPUS SPS=ON ASB=ON FLD=ON L10/FRFP AND (FTC=2004
    OR AYC=2004 OR PRC=2004)
L20 D IRIS AND RUTTS 1-

COST IN U.S. DOLLARS SINCE FILE TOTAL
FULL ESTIMATED COST ENTRY REGION
CA SUBSCRIBER PRICE ENTRY REGION
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL
CA SUBSCRIBER PRICE ENTRY REGION
Connection closed by remote host
Connecting via Winsock to STN

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Welcome to STN International' Enter a/x

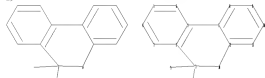
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PASWD:*****

TERMINAL ENTER 1, 2, 3, OR 7:12

***** Welcome to STN International *****

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chain nodes :
13 15
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14
chain bonds :
13-15 13-14
ring bonds :
1-2 1-6 1-7 2-3 2-13 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 12-14 13-14
chain bonds :
1-7 2-13 12-14 13-14 13-15 13-16
unsaturated bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12
isolated ring systems :
containing 1 :

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Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 16:CLASS

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L1 STRUCTURE UPLOADED

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=> a 11 new full
FULL SEARCH INITIATED 13:53:43 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED = 1308 TO ITERATE
100 DA PROCESSED 1308 ITERATIONS 395 ANSWERS
SEARCH TIME: 03:00:00

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L2 395 SEA SSS FUL L1

=> a 12

L3 1160 L2

=> L3 and selectoluminescent or electroluminescence or (light emitting) or OLED)

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92475 ELECTROLUMINESCENT
8 ELECTROLUMINESCENT
92478 ELECTROLUMINESCENT
26934 ELECTROLUMINESCENT
50 ELECTROLUMINESCENT
26939 ELECTROLUMINESCENT
ELECTROLUMINESCENT OR ELECTROLUMINESCENTS
5 ELECTROLUMINESCENT
26940 ELECTROLUMINESCENT
ELECTROLUMINESCENT OR ELECTROLUMINESCENTS
135441 LIGHT
12244 LIGHT

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1.4 8 1.3 AND (ELECTROLUMINESCENT OR ELECTROLUMINESCENCE OR (LIGHT EMITTING) OR OLED)

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YOU HAVE REQUESTED DATA FROM 8 ANSWERS - CONTINUE? Y/(N):y

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L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2010 ACS on STN

2009-1033861 CAPLUS Folio-leaf

Document Number:
15238298

Title Manufacture of poly(arylenevinylene)s for light-emitting materials

Author/Inventor

Patent Assignee/Corporate Source

Sumitomo Chemical Co., Ltd., Japan

Jpn. Kokai Tokkyo Koho, 49pp. CODEN: JKOXAF

Document Type
Report

Language

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2009286890	A	20091210	JP 2008-140563	20080529

Abstract

The poly(arylene)s/ethylenes having different repeating units (I) CA1-Ca2Ar1 (Ar1 = arylene, diethylene, polyethylene, divinyl aromatic amine residue), Ar1, A2 = H, X = aryl, monovalent heterocyclic group, monovalent aromatic amine residue) and (II) A2Ar3 (Ar3 = arylene, divinyl aromatic amine residue, arylene, divinyl aromatic amine residue) are manufactured by (1) reaction of X-HCl, CA2X2 (Ar1, A2 = H, X = trialkylsilyl) with Y1Ar2 (Y1 = A2 = same as in I, Y1, Y2 = halo, alkylsulfone, arylsulfone, arylalkylsulfone) in the presence of Pt catalysts in organic solvents and (2) reaction of the resulting reaction products with Y2Ar2 (Y2 = A2 = same as in I), Y3, Y4 = halo, alkylsulfone, arylsulfone, arylalkylsulfone) and Y3Ar3 (Ar3 = same as in I, Y3, Y4 = benzo and naphtho, benzo acid ester residue) in the presence of Pt catalysts and bases in the organic solvents. The polymers are useful for electrochromic materials, displays, transistors, and solar cells. Thus, I was treated with tri-*n*-butyl-1,2-bis(triisopropylsilyl)ethylene in the presence of dichlorobis(triisopropyl)phosphine(palladium) (II) with the addition of 1,2-dichloro-2,3-ethanediol in the presence of methyltriisopropylsilylchloride to give polymers with poly(ethylene)benzidine repeat unit. Average mol. weight \bar{M}_w 1.7–104 and poly(ethylene)benzidine number-average mol. weight \bar{M}_n 62–193.

H₂ Structure

CAS Registry Number

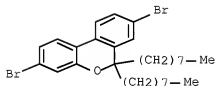
1198601-24-9 CARLOS

Chemical or Trade Name
INDEX NAME NOT YET ASSIGNED

CN 2

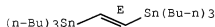
CRM 688013-66-3

CNF C29 H40 Br2 O



CX

CRJ 14275-61-7
CME C26 8556 Sp



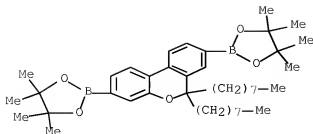
CAS Registry Number
1198601-25-0 CASLON

Chemical or Trade Name
1,6-Benzenediamine, N1,N4-bis[4-bromophenyl]-N1,N4-bis[4-butylphenyl]-,
polymer with 3,8-dihydro-6,6-dioctyl-6H-dibenz[b,d]pyran,
6,6-dioctyl-1,3,8-bis[4,6,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl]-6H-
dibenz[b,d]pyran and 3,1'-(1E)-1,2-ethenediylbis[1,1,1-triisobutylstannane]
(CA TRUM VMA)

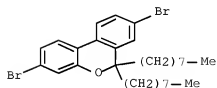
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CRN 688013-75-4
CMF C41 HG4 B2 05

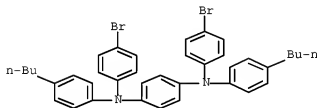
CMF C42 HG4 B2 05



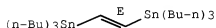
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CIP 658013-66-3
CIP C29 B40 B2 0



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CIP 372205-69-0
CIP C38 B39 B2 92



CN
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CIP 14275-61-7
CIP C28 B56 B2



L4 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number
2008 421819 CAPLUS E41361
Document Number
150 427106

Title
Polyheteroarenes, their compositions and films, organic photoelectric converters and electroluminescent devices with their layers, and monomers for them

Author/Inventor
Ueno, Yasunori; Naguchi, Kiminobu

Patent Assignee/Corporate Source
Sumitomo Chemical Co., Ltd., Japan

Source
Jpn. Kokai Tokkyo Koho, 51 pp. CODEN: JPOKAF

Document Type
Patent

Language
Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2008073808	A	20080409	JP 2008-115261	20080425

Abstract

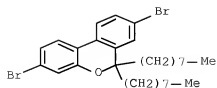
The polyheteroarenes have structural repeating units represented by I (R¹ = H, alkyl, alkoxy, silylthio, etc.; R² = H, alkyl, alkoxy, aryl, cyano, Ar¹ = arylene, heterocyclylene, Z = O, S, m, n = 2-4), preferably I (R¹, R², Ar¹ = same as above). Organic photoelectric converters, e.g., solar cells, have layers containing I show high photoelectric conversion efficiency. The photoelectric converters may also use fullerenes as electron acceptors.

HR Structure

CAS Registry Number
658013-66-3 CAPLUS

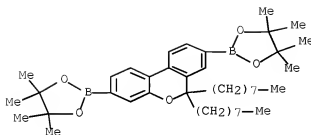
Chemical or Trade Name
6,6'-Dibromo-2,2'-bis[3,3'-bis(bromo-6,6'-diisopropyl)-

(CN 230556 8088)



CAS Registry Number
670213-75-4 CAS103

Chemical or Trade Name
4,6-Dibromo[9,9]pyren, 6,6-diethyl-3,8-bis(4,4,5,5-tetramethyl-1,3,2-
dioxaborolan-2-yl)- (CA INDEX NAME)



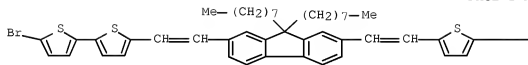
CAS Registry Number
1140930-09-6 CAS102

Chemical or Trade Name
4,6-Dibromo[9,9]pyren, 6,6-diethyl-3,8-bis(4,4,5,5-tetramethyl-1,3,2-
dioxaborolan-2-yl)-, polymer with 1,5''-(1,3,9-diethyl-9H-fluorene-2,7-
diyl)di-2,1-ethenediylbis[5''-brano-2,2''-bithiophene] (CA INDEX NAME)

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CIN 1140929-96-6
CMF C49 R52 R62 R6

PAGE 1-A

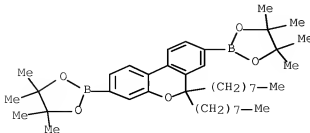


PAGE 1-B

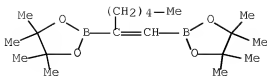


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CIN 688013-75-4
CMF C41 R64 R2 05

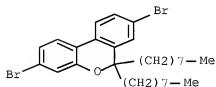


CHN 1082741-59-0
CME C19 B36 B2 06



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CFR 688013-66-3
CMF C29 H40 Br2 O

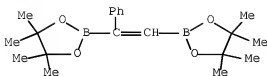


CAS Registry Number
1082173-69-4 CAGL078

Chemical or Trade Name
68-Gibbeno(d)pyran, 3,6-dibromo-6,6-diethyl-, polymer with
2,2'-(1-phenyl-1,2-ethenediyl)bis(4,4',5,5'-tetramethyl-1,3,2-dioxaborolane)
(CA INDEX NAME)

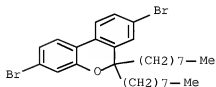
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CFR 916669-90-2
CMF C20 H30 Br2 O4



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CFR 688013-66-3
CMF C29 H40 Br2 O

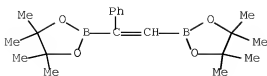


CAS Registry Number
1082173-69-4 CAGL078

Chemical or Trade Name
68-Gibbeno(d)pyran, 3,6-dibromo-6,6-diethyl-, polymer with
2,2'-(1-phenyl-1,2-ethenediyl)bis(4,4',5,5'-tetramethyl-1,3,2-dioxaborolane)
(CA INDEX NAME)

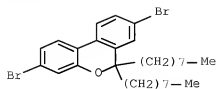
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CFR 916669-90-2
CMF C20 H30 Br2 O4



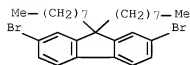
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CHE 688013-66-3
CMF C29 R40 Br2 O



CN 3

CHE 190766-05-4
CMF C29 R40 Br2

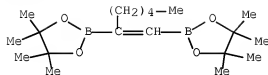


CAS Registry Number
1082713-95-2 CAS#108

Chemical or Trade Name
6,6'-Dibenz[1,1'-biphenyl]-2,2'-diylbis[4,4'-bis(2,4,6-trimethyl-1,3,5-triazin-2-yl)phenyl]-9,9'-fluorene and
2,2'-[1,1'-bis(4,4'-bis(2,4,6-trimethyl-1,3,5-triazin-2-yl)phenyl)]bis[4,4'-bis(2,4,6-trimethyl-1,3,5-triazin-2-yl)phenyl]
(CA INDEX NAME)

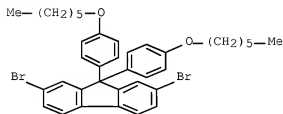
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CHE 102741-59-0
CMF C19 R36 R2 O4



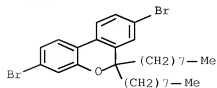
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CHE 690394-36-4
CMF C31 R40 Br2 O2



CN 3

CHE 688013-66-3
CMF C29 R40 Br2 O



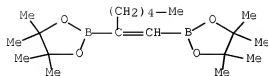
CAS Registry Number

Chemical or Trade Name
 1,4-Benzenediamine, N1,N4-bis[4-(benzophenyl)-81,84-bis(4-butylphenyl)-,
 polymer with 3,8-diformyl-6,6-dialkyl-2H-dibenzo[b,d]pyran,
 5,8'-[5,8-diethyl-9H-fluorene-2,7-diyl]bis[1,3,2-dioxaborolane] and
 2,8'-[1-pentyl-1,2-naphthediyl]bis[4,4',5,5'-tetramethyl-1,3,2-
 dioxaborolane], black (CA 3008 8086)

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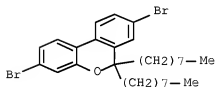
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 CNF C39 B36 B2 04



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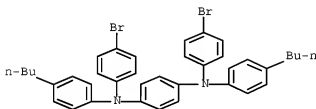
CRF 688213-66-3
 CNF C39 B48 B2 04



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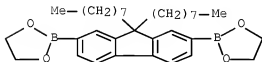
CRF 372320-99-0
 CNF C38 B38 B2 32



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CRF 210347-49-2
 CNF C33 B49 B2 04



L4 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number
 2008 603771 CAPLUS File 3602

Document Number
 145124968

Title
 Polymer compound and its use in heat-resistant polymer light-emitting device

Author/Inventor
 Kobayashi, Shigeyuki; Kobayashi, Satoshi

Patent Assignee/Corporate Source
 Sumitomo Chemical Company, Limited, Japan

Source
 PCT Int. Appl., 154 pp. CODEN: PXXXX

Document Type
 Patent

Language
 Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2006/070848	A1	2006/0708	WO 2005-JP04011	2005/1221
JP 2006/182820	A	2006/0713	JP 2004-378317	2004/1228
GB 2437213	A	2007/1017	GB 2007-14935	2005/1221
DE 112005003270	T3	2008/0410	DE 2005-112005003270	2005/1221
US 2008/0145571	A1	2008/0619	US 2007-722225	2007/0670
KR 2007/090041	A	2007/0904	KR 2007-717119	2007/0725
CN 101124259	A	2008/0213	CN 2005-80048421	2007/0817

Abstract

Disclosed is a polymer compound characterized by containing a structure represented by the following formula I (ring A and ring B independently represent an optionally substituted aromatic hydrocarbon ring, and ring C represents an alicyclic hydrocarbon which contains no fused aromatic compound while having at least one substituent, the alicyclic hydrocarbon may contain a heteroatom).

HR Structure

CAS Registry Number
856732-77-7 CAPLOG

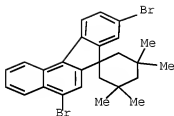
Chemical or Trade Name

6,8-Dibromo-2,9-dipyrro-3,6-dibromo-6,6-dioctyl-, polymer with
5,8-dibromo-3',5',5'',5'''-tetramethylspiro[70]hepta[6,1]fluorene-7,1'-
cyclohexane) (5:1) (CA INDEX 3096)

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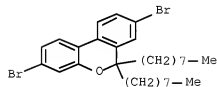
CFR 594732-73-3
CNF C28 H26 Br2



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CFR 688013-66-3
CNF C29 H40 Br2 O



GS CITING REF COUNT: 2 THERE ARE 2 CAPLOG RECORDS THAT CITE THIS RECORD
(6 CITING)

Accession Number
2005212339 CAPLUS [Full Text](#)
Document Number
144301737

Title
Polymer luminescent material composition and polymer light-emitting devices

Author/Inventor
Uemoto, Yasunori; Shirasawa, Nobuhiko; Nakamichi, Hirotsugu
Patent Assignee/Corporate Source
Sumitomo Chemical Company, Limited, Japan

Source
PCT Int. Appl., 82 pp. CODEN: P6CXD2

Document Type
Patent

Language
Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006252950	A1	20060309	WO 2005-JP15606	20050823
GB 2432838	A	20070806	GB 2007-0593	20050823
GB 2432838	B	20090218		
DE 112005002083	T9	20070719	DE 2005-112005002083	20050823
CN 101048485	A	20071003	CN 2005-90036762	20050823
JP 2006097008	A	20060413	JP 2005-236978	20050831
JP 2006169502	A	20060629	JP 2005-236979	20050831
KR 2007081840	A	20070614	KR 2007-707664	20070928
US 2006039765	A1	20060212	US 2007-074629	20070821

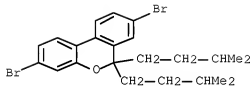
Abstract

A polymer luminescent material composition is characterized by comprising a polymer luminescent material and a compound selected from among compts. of the following general formulas I to IV, wherein X is an atom or atomic group forming a 3- or 4-membered ring together with the four carbon atoms constituting the 2 benzene rings, and Q and Y are each independently H, halo, silyl, alkyl, alkoxy, aryl, alkyl, arylalkyl, arylalkoxy, arylalkylthio, alkyl, alkylthio, arylalkylthio, substituted silyloxy, substituted silylthio, substituted silylamino, substituted amino, amido, an acid imide group, acyloxy, a mono- or di- heterocyclic group, heteroalkoxy, heteroalkylthio, cyano, or nitro.

HR Structure

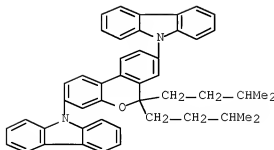
CAS Registry Number
688013-67-4 CAPLUS

Chemical or Trade Name
6,6'-Dibromo-2,2'-bipyrene, 3,3'-bis(4-bromo-6,6'-bis(3-methylbutyl))- (CA INDEX NAME)



CAS Registry Number
878551-65-5 CAPLUS

Chemical or Trade Name
3,3'-Bis(4-bromo-6,6'-bis(3-methylbutyl))-6,6'-dibromo-2,2'-bipyrene-3,3'-diylbis- (CA INDEX NAME)

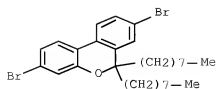


OF CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

Accession Number
2005324209 CAPLUS [Full Text](#)
Document Number
142374970

Title

CDR 688013-66-3
CMF C29 H40 Nc2 C



L4 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number

2004113840 CAPLUS [Full text](#)

Document Number

14282001

Title

Color conversion film for organic electroluminescent device

Author/Inventor

Imura, Kyotoshi; Doi, Shuji

Patent Assignee/Corporate Source

Sumitomo Chemical Co., Ltd., Japan

Source

Jpn. Kokai Tokkyo Koho, 24 pp. CODEN: JPHXXF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004362910	A	20041224	JP 2003159600	20030604

Abstract

The invention relates to a color conversion film, suited for use in an organic electroluminescent device, comprising a fluorescent and/or phosphorescent conjugated polymer.

Hit Structure

CAS Registry Number
811329-84-8 CAPLUS

Chemical or Trade Name

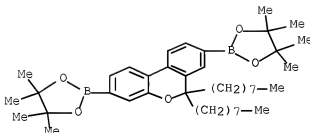
2,1,3-Benzoxadiazole, 4,7-bis(15-bromo-6-heptyl-2-thienyl)-, polymer with 6,6'-diethyl-3,3'-bisisoindole-4,5,5'-tetramethyl-1,3,2-dioxaborolane-2-yl]-6,6'-dibromo[9,9'-pyrene] (C1A 3506X NAME)

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CRN 688013-75-4

CMF C41 B64 B2 05

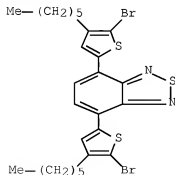


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CRN 444579-39-9

CMF C26 B50 B2 03



Accession Number

2004-090302 CAPLUS File-true

Document Number

140.415047

Title

High-molecular compounds and polymer light-emitting devices made by using the same

Author/Inventor

Os. Shuji, Kobayashi, Satoshi, Naguchi, Takamizu

Patent Assignee/Corporate Source

Sunshine Chemical Company, Limited, Japan

Source

PCT Int. Appl., 131 pp. CODEN: PXXXX

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KFIG	DATE	APPLICATION NO.	DATE
IWO 2004039859	A1	20040513	IWO 2003-JP12697	20031003
JP 2004168999	A	20040817	JP 2003-343244	20031001
AU 2003268752	A1	20040520	AU 2003-268752	20031003
EP 1571170	A1	20050907	EP 2002-746697	20031003
US 20050138531	A1	20050612	US 2005-032937	20050426
JP 2009215557	A	20090924	JP 2009-67794	20090919

Abstract

The invention relates to a high-mol. compds comprising repeating units represented by the general formula I or II and having number-average mol. wts. of 103-108 in terms of poly(arylene (I)) [wherein Ar1 and Ar2 are each independently a trivalent aromatic hydrocarbon group or a trivalent heterocyclic group, and X1 and X2 are each independently O, S, C(=O), Si(R3)(R4), N(R5), B(R6), P(R7), or P(=O)(R8), with the proviso that X1 and X2 must not be the same and that X1 and X2 are bonded resp. to the adjacent carbon atoms constituting the aromatic ring of Ar1, and X2 and Ar1 are bonded resp. to the adjacent carbon atoms constituting the aromatic ring of Ar2] (I) [wherein Ar3 and Ar4 are each independently a trivalent aromatic hydrocarbon group or a trivalent heterocyclic group, and X3 and X4 are each independently N, B, P, C(R5), or Si(R6), with the proviso that X3 and X4 must not be the same and that X3 and Ar4 are bonded resp. to the adjacent carbon atoms constituting the aromatic ring of Ar3, and X4 and Ar3 are bonded resp. to the adjacent carbon atoms constituting the aromatic ring of Ar4]

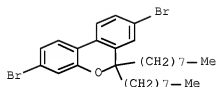
HN Structure

CAS Registry Number

68023-65-3 CAPLUS

Chemical or Trade Name

68-Gibbenol(bis)pyran, 3,6-dibromo-6,6-diethyl- (CA INDEX NAME)

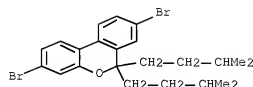


CAS Registry Number

68023-75-4 CAPLUS

Chemical or Trade Name

68-Gibbenol(bis)pyran, 3,6-dibromo-6,6-bis(3-methylbutyl)- (CA INDEX NAME)

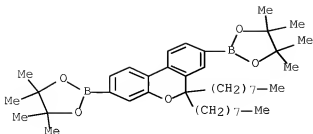


CAS Registry Number

68023-75-4 CAPLUS

Chemical or Trade Name

68-Gibbenol(bis)pyran, 6,6-diethyl-3,6-bis(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)- (CA INDEX NAME)

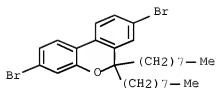


CAS Registry Number
688013-70-7 CAS105

Chemical or Trade Name
6,6'-Dibenz[1,3]pyran, 3,6-dibromo-6,6'-dioctyl-, homopolymer (9CI) (CA INDEX NAME)

CN
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CFR 688013-66-3
CMF C29 B40 Br2 O

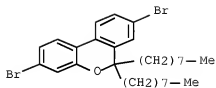


CAS Registry Number
688013-70-8 CAS105

Chemical or Trade Name
6,6'-Dibenz[1,3]pyran, 3,6-dibromo-6,6'-dioctyl-, polymer with 1,4-dibromo-2,5-bis(isooctyloxy)benzene (9CI) (CA INDEX NAME)

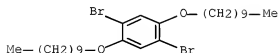
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CFR 688013-66-3
CMF C29 B40 Br2 O



CN
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CFR 112269-99-2
CMF C26 B44 Br2 O2

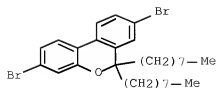


CAS Registry Number
688013-80-1 CAS105

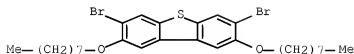
Chemical or Trade Name
6,6'-Dibenz[1,3]pyran, 3,6-dibromo-6,6'-dioctyl-, polymer with 3,7-dibromo-2,5-bis(isooctyloxy)benzothienophene (9CI) (CA INDEX NAME)

CN
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CFR 688013-66-3
CMF C29 B40 Br2 O

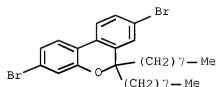


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 CFN 599212-67-6
 CMF C20 H38 Br2 O2 S

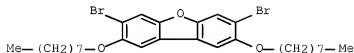


CAS Registry Number
 689013-91-2 (AFL)08
 Chemical or Trade Name
 4,4'-Dibenzothienopyran, 3,8-dibromo-6,6-diethyl-, polymer with
 3,7-dibromo-2,2'-bis(octyloxy)dibenzofuran (PC1) (CA INDEX NAME)

CN 1
 CFN 689013-66-3
 CMF C29 H40 Br2 O

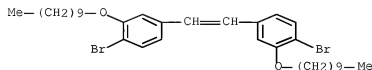


CN 2
 CFN 599212-92-7
 CMF C20 H38 Br2 O2

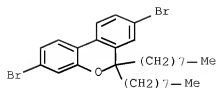


CAS Registry Number
 689013-93-6 (AFL)08
 Chemical or Trade Name
 4,4'-Dibenzothienopyran, 3,8-dibromo-6,6-diethyl-, polymer with
 1,1'-(1,2'-ethanedithyl)bis(4-bromo-3'-decyloxy benzene) (PC1) (CA INDEX NAME)

CN 1
 CFN 689013-62-3
 CMF C34 H50 Br2 O2



CN 2
 CFN 689013-66-3
 CMF C29 H40 Br2 O

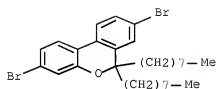


CAS Registry Number
689213-84-5 CNF105

Chemical or Trade Name
Benzonamine, N,N-bis(4-bromophenyl)-4-(1-methylpropyl)-, polymer with
3,8-dibromo-6,7-diisopropyl-2H-dibenzo(b,d)pyran (P021) (CA INDEX NAME)

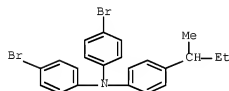
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CFR 689213-66-3
CMF C29 H40 Br2 0



CN
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CFR 257976-94-1
CMF C22 H21 Br2 3

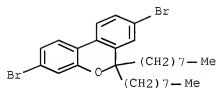


CAS Registry Number
689213-85-6 CNF105

Chemical or Trade Name
1,4-Benzenediamine, N,N'-bis(4-bromophenyl)-N,N'-bis(4-ethylphenyl)-,
polymer with 3,8-dibromo-6,7-diisopropyl-2H-dibenzo(b,d)pyran (P021) (CA INDEX NAME)

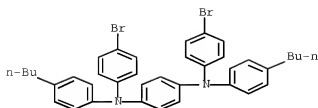
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CFR 689213-66-3
CMF C29 H40 Br2 0



CN
2

CFR 372220-89-0
CMF C38 H39 Br2 12

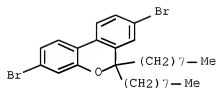


CAS Registry Number
688013-66-3 CAS105

Chemical or Trade Name
1,4-bis[2,6-bis(4-bromophenyl)-4,4'-bis(4-butylphenyl)]-
polymer with 3,7-dibromo-2,5-bis(octyloxy)dibenzothiophene and
3,4-dibromo-4,6-dioctyl-2H-dibenzoo[3,4-d]pyran (PCT) (CA INDEX
NAME)

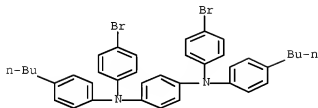
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CFR 688013-66-3
CMF C29 H40 Br2 O



CN
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CFR 372200-89-0
CMF C38 H38 Br2 S2

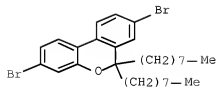


CAS Registry Number
688013-66-3 CAS105

Chemical or Trade Name
1,4-bis[2,6-bis(4-bromophenyl)-4,4'-bis(4-butylphenyl)]-
polymer with 3,7-dibromo-2,5-bis(octyloxy)dibenzothiophene and
3,4-dibromo-4,6-dioctyl-2H-dibenzoo[3,4-d]pyran (PCT) (CA INDEX NAME)

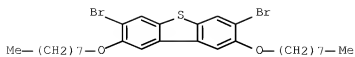
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CFR 688013-66-3
CMF C29 H40 Br2 O



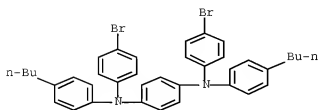
CN
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CFR 599212-69-6
CMF C38 H38 Br2 O2 S



ON
3

CRB 372209-99-0
CMF C36 H56 Br2 S2



66 CITING REF COUNT: 9 THERE ARE 9 CASPLUS RECORDS THAT CITE THIS RECORD
(22 CITINGS)



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1 2 3 4 5 6 7 8 9 10 11 12 13 14
ring bonds 1
1-2 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 12-13 13-14
each/proc bonds 1
1-7 2-11 12-14 13-14
normalized bonds 1
1-2 (-+ 1-1) 3-4 4-5 (-+ 7-8 7-12 8-9 9-10 10-11 11-12)
isolated ring system 1
containing 1 1

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G1C7,O5,N,P,R1,B
G21O,S,P,F,B
Match level 1
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom

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L5 STRUCTURE UNLOADED

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INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
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PROJECTED ANSWERS: 17044 TO 18654

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92479 ELECTROLUMINESCENT
ELECTROLUMINESCENT OR ELECTROLUMINESCENCE)
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ELECTROLUMINESCENCE OR ELECTROLUMINESCENCE)
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12564 LIGHTS
1354774 LIGHT
LIGHT OR LIGHTS)
143446 EMITTING
228 EMITTING
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EMITTING OR EMITTING)
18543 LIGHT EMITTING
LIGHT (N) EMITTING)
7740 OLED
7828 OLED
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(OLED OR OLED)
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L8 ANSWER 1 OF 48 CAPLUS COPYRIGHT 2010 ACS on STM
 Accession Number
 2010 114706 CAPLUS File:26
 Document Number
 152 228240

Title
 Organic element for low voltage electroluminescent devices
 Author/Inventor
 Bagley, William J. Hataw, Tukaram K., Liao, Liang-Sheng, Hubek, Kevin P., Rajeswaran, Manj, Andrievsky, Nataliya
 Patent Assignee/Corporate Source
 Eastman Kodak Company USA
 Source
 U.S. Pat. Appl. Publ. 88pp., Cont-in part of U.S. Ser. No. 796,993 Abandoned CODEN USXXXXO
 Document Type
 Patent
 Language
 English
 Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 20100019671	A1	20100128	US 2009-073175	20091005
US 2007092759	A1	20070426	US 2006-001336	20060809
US 2007027347	A1	20070906	US 2007-796953	20070430

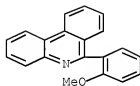
Abstract

The invention relates to an OLED device including a cathode, a light-emitting layer and an anode, and having located between the cathode and the light-emitting layer, a further layer containing an alkali metal or alkaline earth metal salt of a 2-(2-hydroxyphenyl)phenanthroline derivative. Such devices exhibit reduced drive voltage while maintaining good luminance.

Hit Structure

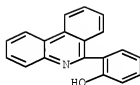
CAS Registry Number
412070-70-9 CAPLUS

Chemical or Trade Name
Phenanthroline, 6-(2-methoxyphenyl)- (CA INDEX NAME)



CAS Registry Number
516596-85-1 CAPLUS

Chemical or Trade Name
Phenol, 2-(6-phenanthridinyl)-, lithium salt (1:1) (CA INDEX NAME)



LG ANSWER 2 OF 48 CAPLUS COPYRIGHT 2010 ACS on STM

Accession Number
2010 91252 CAPLUS Edited
Document Number
152 44705

Title

Preparation of anthracene derivatives for organic electronic device

Author/Inventor

Kim, Kong-Kyeom; Son, Se-Hwan; Lee, Dea-Woong; Jeon, Sang-Young; Jang, Hye-Young
Patent Assignee/Corporate Source
LG Chem. Ltd. S. Korea

Source

PCT Int. Appl., 81pp. CODEN PBOXD2

Document Type

Patent

Language

Korean

Patent Information

PATENT NO	KIND	DATE	APPLICATION NO.	DATE
W/O 2010005266	A2	20100114	W/O 2009-KR3799	20090710
KR 2010009879	A	20100122	KR 2009-87362	20090711

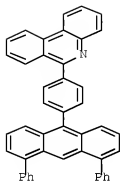
Abstract

The compounds [n = 1-3; L1-L3 = direct bond or (un)substituted aryl, Ar1, Ar2 = (un)substituted (non)condensed aryl, (un)substituted (non)condensed heteroaryl, (un)substituted fluorenyl, etc.; Ar = (un)substituted (non)condensed aryl, (un)substituted (non)condensed heteroaryl, (un)substituted fluorenyl, etc.; a, b = 0-3; X1, X2 = H, (un)substituted alkyl, (un)substituted alkenyl, etc.] were prepared. For example, reduction of 1,8-dithiaanthracene, bromination, Negishi-type cross-coupling reaction with 2-naphthylboronic acid, and coupling reaction with diphenylamine afforded compound II. Electroluminescent device comprising II emitted green light with 25.1 cd/A.

Hit Structure

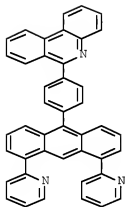
CAS Registry Number
1204236-43-0 CAPLUS

Chemical or Trade Name
Phenanthroline, 6'-[2-(4,5-diphenyl-2-phenyl-1-phenyl)]- (CA INDEX NAME)



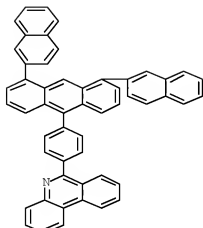
CAS Registry Number
1204236-55-5 CAS105

Chemical or Trade Name
Phenanthridine, 6-[(4-{8,5-di-2-pyridyl}-9-anthracenyl)phenyl]- (CA INDEX NAME)



CAS Registry Number
1204236-79-5 CAS105

Chemical or Trade Name
Phenanthridine, 6-[(4-{8,5-di-2-naphthalenyl}-9-anthracenyl)phenyl]- (CA INDEX NAME)



LI ANSWER 3 OF 49 CAPLUS COPYRIGHT 2010 ACS on GTN

Accession Number
20091539661 CAPLUS [Full-text](#)

Document Number
15036208

Title Manufacture of poly(arylenevinylene)s for light-emitting materials

Author (Inventor)
Naguchi, Kiminobu

Patent Assignee/Corporate Source
Sumitomo Chemical Co., Ltd., Japan

Source
Jpn. Kokai Tokkyo Koho, 49pp CODEN JHOXAF

Document Type
Patent

Language
Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2009286990	A	20091210	JP 2008-140063	20080529

Abstract

This poly(arylenevinylene)s having structural repeating units (I) CA1-CA2Ar1 (Ar1 = arylene, divalent heterocyclic group, divalent aromatic amine residue, A1, A2 = H, alkyl, aryl, monovalent heterocyclic group, monovalent aromatic amine residue) and (II) AC2Ar2 (Ar2 = arylene, divalent heterocyclic group, divalent aromatic amine residue) are manufactured by (1) reaction of 2,2'-CA1-CA2Ar2 (Ar1, Ar2 = same as in I, X1, X2 = triisilylstermy) with Y3Ar3Y4 (Ar3 = same as in I, Y1, Y2 = halo, alkylsulfonate, arylsulfonate, arylalkylsulfonate) in the presence of Pd catalysts in organic solvents and (2) reaction of the resulting reaction products with Y3Ar3Y4 (Ar3 = same as in II, Y3, Y4 = halo, alkylsulfonate, arylsulfonate, arylalkylsulfonate) and Y3Ar3Y4 (Ar3 = same as in II, Y3, Y4 = boronic acid residue, boronic ester residue) in the presence of Pd catalysts and bases in the organic solvents. The polymers are useful for electroluminescent materials, displays, transistors, and solar cells. Thus, I was treated with trans-1,2-bis(triisilylstermy)ethylene in the presence of dichlorobis(triphenylphosphine)palladium(0) in toluene and then with II and 5,5'-dibromo-2,2'-biphenylene in the presence of methyltriethylammonium chloride to give a polymer with poly(arylenevinylene)s-based weight-average mol. weight 1.7 × 10⁴ and poly(arylene)s-based number-average mol. weight 6.2 × 10³.

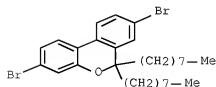
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CAS Registry Number
1199661-23-3 CAPLUS

Chemical or Trade Name
INDEX NAME NOT YET ASSIGNED

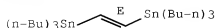
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CHK 689013-66-3
CHK C26 R40 R62 0



CHK
2

CHK 14275-61-7
CHK C26 R56 R62



CAS Registry Number
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CRN 688013-75-4
CMF C41 R64 R2 05



CM

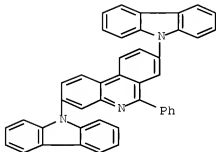
CX

Abstract Two materials containing carbazole moieties and exhibiting a high band gap energy, 3,8-di(9H-carbazol-9-yl)-6-phenylphenanthridine (Dc2P) and 3,6-di(naphthalene-2-yl)-9-phenyl-9H-carbazole (DnAc), were synthesized via C-N coupling and Suzuki coupling reactions, resp. The compound Dc2P exhibited blue emission with the CIE coordinates of $x = 0.163$ and $y = 0.136$ from the OLED device, [Ti(ODMD)3-in-oxo]/NPB/N,N'-bis(naphthalene-1-yl)-N,N'-bis(phenyl)benzidine (DCPP)/LiF/Al. The doped device, ITO-2-NATATA/4,4'-Tm2-naphthyl(phenyl)phenylamine (Pb-amine)/NPB/DCPP-0.9Me9-h4,7-diphenyl-1,10-phenanthroline/Aq3/3,3'-bis(hydroxyquinoline)aluminum (LiF/Al) showed bright yellowish-green emission with a maximum luminance of 23,000 cd/m² when the synthesized DCPP was applied as a host material for the phosphorescent green dopant. From

the double layer device, (ITO/DNAc/Ag3LUF/A), in which DNAc was used as the hole transporting material, the yellowish-green color arising from the Ag3 was also observed
H6 Structure

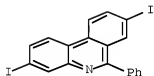
CAS Registry Number
1191711-09-3 CARYLOS

Chemical or Trade Name
Phenanthroline, 3,8-di-(9H-carbazol-9-yl)-6-phenyl- (CA INDEX NAME)



CAS Registry Number
309756-35-6 CARYLOS

Chemical or Trade Name
Phenanthroline, 3,8-di-iodo-6-phenyl- (CA INDEX NAME)



LB ANSWER 5 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number
2009 703111 CAPLUS E-6-100

Document Number
151 56977

Title

Preparation of vinyboron chelates as light-emitting materials, electron-transport materials, electron-injection materials or organic semiconductors, processes for their preparation and their use in functional electronic devices

Author/Inventor

Murakami, Masahiro, Ishida, Naoki, Naumi, Mizuno, Akihiro, Yoshida, Hideo, Hasegawa, Munehito, Arai, Tameyasu, Goya, Tadayoshi

Patent Assignee/Corporate Source

Kyoto University, Japan; Nippon Shokubei Co., Ltd.

Source

PCT Int. Appl., 2009pp. CODEN: PXXXX

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2009/25262	A1	20090811	WO 2008/307896	20081204
JP 200915325	A	20090716	JP 2008-307846	20081202

Abstract

Vinyboron chelates [R¹, R², R³, R⁴ = (ar)substituted aryl, any two of R¹-R³ can form a ring, R⁴ = H, a substituent, m = 0-5, O = linker, X = M, O, S, P, etc., dotted circle containing OX = part of a common ring, Q-V with dotted line = single or double bond, R⁵ = H or mono-, bi- or arylsubstituted organic group, n = 1-6, when n = 2-4, then R¹-R⁴ are, O, V are the same], useful as light-emitting materials, electron transport materials, electron injection materials, gas hole-blocking materials or organic semiconductor materials, are claimed. I are prepared, e.g. by reaction of ammonium alkylthiophosphates (II), same R¹-R³, R⁵, n, R⁵-R⁶ = organic group with halide compounds (III), same X, O, R⁴, m, n = 1-6, C, D, etc. in the presence of a catalyst containing at least one metal selected from among Pd, Pt and Ni. Thus, two examples of (I) shown as IV and V, preparation given for both required for lower voltages than Alq₃ to produce high light intensity as electron-transport layers in an electroluminescent device (OLED); the threshold voltages for IV and V were 7 V and 8 V, resp., whereas for Alq₃ it was 13 V.

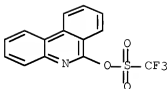
Hit Structure

CAS Registry Number

115064-19-6 CAS105

Chemical or Trade Name

Methanesulfonyl acid, 1,1,1-trifluoro-, 6-phenanthridinyl ester (CA INDEX NAME)



LB ANSWER 6 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number
2008 490817 CAPLUS E-6-100

Document Number
150 448125

Title

Transition metal cyclometallated complexes with chelating bidentate N,S- and N,O-heterocyclic carbene-heterocycle ligands as light-emitting materials for organic light-emitting devices (OLEDs)

Author/Inventor

Moh, Oliver, Lemnitz, Christian, Fuchs, Evelyn, Kahle, Klaus, Langer, Nicole, Schildknecht, Christian, Rudolph, Jens, Wagenblast, Gerhard, Watanabe, Soichi

Patent Assignee/Corporate Source

Bayer AG, Germany

Source

PCT Int. Appl., 8pp. CODEN: PXXXX

Document Type

Patent

Language

German

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008/05280	A1	20080423	WO 2006-EP64074	20061017

Abstract

Transition metal complexes [M], (M)C(M)MnZn, M = Group IB, IIB metal, transition metal, lanthanide, preferably M = Ir, Os, Pt, L = mono- or bidentate neutral ligand, Z = mono- or dianionic ligand, X = C, N, R¹ = F, ON, C1-20 alkyl, alkyloxy, C6-30 arylalkoxy, arylthio, C6-30 heteroaryl or absent, Y = S, O, organophosphine, digorganyldiene, preferably Y = O, C, A, D, E, G, J, K, Q, T = N, CH, C-aryloxy, two adjacent ring atoms may form a 3-6-membered cycle, x = 1, m, n = 0, 1], useful as stable and efficient light-emitting materials for manufacturing of organic light-emitting devices, were prepared by methylation of the calcium carbene precursors (NHC-Ca-alkyl) (D-W, same A, D, E, G, J, K, Q, T, R¹, Y = phosphine, silylene, Y = halide, pseudohalide, BF₄⁻, BPh₄⁻, PF₆⁻, AsF₆⁻, SbF₆⁻) or by desulfurization of the corresponding oxadiazaphenanthridine- or triazaphenanthridine-3-thione by HCO₂H followed by oxidation and transmetalation, preferably with [Ir(CO)Cl(pfp-1,3-ndf)]⁺. In an example, the complex (NHC29) (1A) A = D = E = G = J = K = Q = T = CH, R¹ absent, X = N, Y = O, O) were prepared (synthetic details not disclosed) starting from phenanthridine-6-thione and 6-phenanthridinone, resp., via 1,2,4-triazolo[4,3-b]phenanthridine-3-thione and oxadiazolo[4,3-b]phenanthridine tetrafluoroborate intermediates, resp.

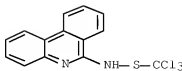
Hit Structure

CAS Registry Number

1145831-62-6 CAS105

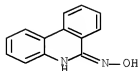
Chemical or Trade Name

Methanesulfonyl acid, 1,1,1-trichloro-9-(6-phenanthridinyl)- (CA INDEX NAME)



CAS Registry Number
1145011-65-7 CAPLUS

Chemical or Trade Name
6-Phenanthridinamine, N-hydroxy- (CA INDEX NAME)



LB ANSWER 7 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number
2009-487919 CAPLUS [Full Text](#)
Document Number
150-472956

Title

Transition metal cyclometallated complexes with chelating bidentate N-heterocyclic carbene-heterocyclic ligands as light-emitting materials for organic light-emitting devices (OLEDs)

Author/Inventor

Matt, Oliver; Lemmer, Christian; Fuchs, Evelyn; Kahle, Klaus; Langer, Nicole; Schildhues, Christian; Rudolph, Jens; Wagenblast, Gerhard; Watanabe, Seichi

Patent Assignee/Corporate Source

BASF AG, Germany

Source

PCT Int. Appl., 70pp CODEN P90XDE

Document Type

Patent

Language

German

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2009/050281	A1	20090423	WO 2008-EP64064	20081017

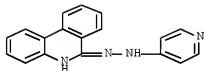
Abstract

Transition metal complexes [E] (NHG)(Mun)Zn, M = Group IB, IIB metal, transition metal, lanthanide, preferably M = Ir, Os, Pt, L = mono- or bidentate neutral ligand, Z = mono- or dianionic ligand, X = C, N, preferably X = N, R1 absent, when X = C, R1 = F, Cl, C1-20 alkyl, arylthio, C6-30 arylalkoxy, arylthio, C6-30 (hetero)aryl, R2 = organyl, A, D, E, G, J, K, Q, T = H, CH, Corganyl, two adjacent ring atoms may form a 3-6-membered cycle, x = 1, m, n = 0, 1), useful as stable and efficient light-emitting materials for manufacturing of organic light-emitting devices, were prepared by metalation of the sodium carbene precursors [NH-C(R1)-Y] (2-Y, same A, D, E, G, J, K, Q, T, R1, R2, Y = imido, pseudohalo, SF6-, BF6-, PF6-, AsF6-, ClBF6-), preferably in one-pot process with a metal complex and ligands L and Z, preferably by reduction of [NH-C(R1)-Y] with [TiCl4-CiCl2(x=1-5,oo)]2 in an example, 1.0 mmol of the ligand iodide precursor, 1-methyl-1,2,4-triazole(3-phenanthridinium iodide (Zar), X = N, R1 absent, R2 = Me, A = D = E = G = J = K = Q = T = CH) was reacted with 5.5 mmol of Ag2O in 200 mL of MeCN for 6 h at 50 °C under argon, giving 54% of the silver carbene [NH-C(R1)-Y]2, which was reacted with [TiCl4-CiCl2(x=1-5,oo)]2 to give the [NH-C(R1)-Y]2 (1a, X = N, R1 absent, R2 = Me, A = D = E = J = K = Q = T = CH, G = C, x = 3, m = n = 0) with 75% yield. In another example, the complex 1a exhibited blue emission at 440, 461 nm upon excitation at 320 nm by HeCd laser, the light-emitting layer made with 1a as an active component exhibited electroluminescence at 450, 479 nm, efficiency of 13.4 cd/A, quantum yield of 7.2% and maximum brightness of 1300 cd/m2.

HE Structure

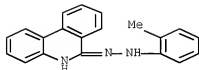
CAS Registry Number
1145788-07-5 CAPLUS

Chemical or Trade Name
Phenanthridine, 6-[2-(4-pyridinyl)hydrazinyl]- (CA INDEX NAME)



CAS Registry Number
1145788-02-4 CAPLUS

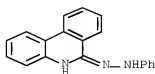
Chemical or Trade Name
Phenanthridine, 6-[2-(2-methylphenyl)hydrazinyl]-, hydrochloride (1:1)
(CA INDEX NAME)



CAS Registry Number
1145788-63-9 CAPLUS

Chemical or Trade Name

Phenanthridine, 6-(2-phenylhydrazinyl)-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

LIB ANSWER 8 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number

2009-46489 CAPLUS E6(26)7

Document Number

150 503406

Title

Deep blue electroluminescent host material and organic electroluminescent element

Author/Inventor

Kim, Byoung Su

Patent Assignee/Corporate Source

LG Display Co., Ltd., S. Korea

Source

Repub. Korean Konghae Taseho Kongbo, Rep. CODEN KRXXA7

Document Type

Patent

Language

Korean

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2009036441	A	20090414	KR 2007-101631	20071009

Abstract

This invention provides a host material shown in chemical formula 1 (R1 = hydrogen, C1-12 alkyl, or substituted or unsubstituted C4-30 aromatic group (capable of containing heteroatom ring); R2 and R3 = substituted or unsubstituted C4-30 aromatic group (capable of containing heteroatom ring)) and an organic electroluminescent element capable of emitting deep blue light by using the host material.

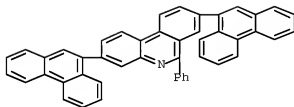
Hit Structure

CAS Registry Number

1149348-26-2 CAPLUS

Chemical or Trade Name

Phenanthridine, 3,8-di-2-phenanthrenyl-6-phenyl- (CA INDEX NAME)

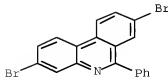


CAS Registry Number

895622-88-7 CAPLUS

Chemical or Trade Name

Phenanthridine, 3,8-dibromo-6-phenyl- (CA INDEX NAME)

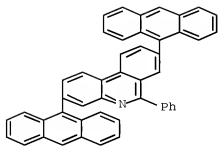


CAS Registry Number

1149348-26-4 CAPLUS

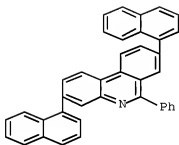
Chemical or Trade Name

Phenanthridine, 3,8-di-9-anthracenyl-6-phenyl- (CA INDEX NAME)



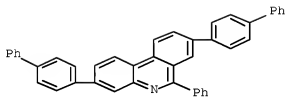
CAS Registry Number
1149548-20-0 CAGL05

Chemical or Trade Name
Phenanthridine, 7,8-bis[1-naphthalenyl]-6-phenyl- (CA INDEX NAME)



CAS Registry Number
1149548-30-0 CAGL05

Chemical or Trade Name
Phenanthridine, 7,8-bis[1,3'-biphenyl]-6-yl]-6-phenyl- (CA INDEX NAME)



Accession Number
2009 42389 CAPLUS F6-176

Document Number
150 427185

Title

Polyheteroarenes, their compositions and films, organic photoelectric converters and electroluminescent devices with these layers, and monomers for them

Author/Inventor
Utsun, Yasunori; Noguchi, Kiminobu

Patent Assignee/Corporate Source
Sumitomo Chemical Co., Ltd., Japan

Source
Jpn. Kokai Tokkyo Koho, 51pp. ODOEN J8004F

Document Type
Patent

Language
Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2009073808	A	2009-04-09	JP 2008-115261	2008-04-25

Abstract

The polyheteroarenes have structural repeating units represented by I (R = H, alkyl, alkoxy, allylthio, etc.; R1 = H, alkyl, alkoxy, aryl, cyano; Ar1 = arylene, heterocyclylene; Z = O, S, m, n = 2-4), preferably II (R, R1, Ar1 = same as above). Organic photoelectric converters, e.g., solar cells, have layers containing I show high photoelectric conversion efficiency. The photoelectric converters may also use fullerenes as electron acceptors.

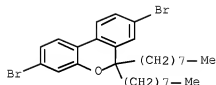
HR Structure

CAS Registry Number

658023-60-3 CAPLUS

Chemical or Trade Name

6,6-Dibromo[5,6]dipyran, 3,8-diisopropyl- (CA INDEX NAME)

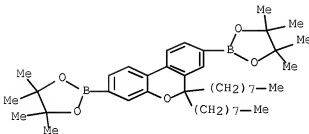


CAS Registry Number

658023-75-4 CAPLUS

Chemical or Trade Name

6,6-Dibromo[5,6]dipyran, 6,6-diisopropyl-3,8-bis(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)- (CA INDEX NAME)



CAS Registry Number

1140829-09-6 CAPLUS

Chemical or Trade Name

6,6-Dibromo[5,6]dipyran, 6,6-diisopropyl-3,8-bis(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)-, polymer with 5,5'-(1,9-diisopropyl-9H-fluorene-2,7-diylidene)-2,2'-bis(4,4'-oxydiphenyl)-5,5'-dicarboxy-2,2'-bisthiophene (CA INDEX NAME)

CM

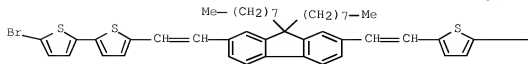
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CMF 1140829-95-6

CMF CMF US2 54

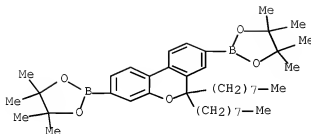
PAGE 1-A





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CFR 68013-75-4
CMF C41 R64 R2 05

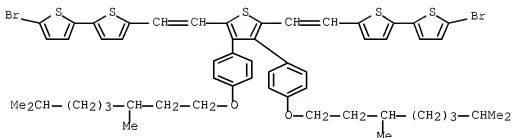


CAS Registry Number
1140930-33-6

Chemical or Trade Name
6,6'-Dibromo[2,2'-bipyrene]-2,2'-diol, 4,4',5,5'-tetramethyl-1,3,2-dioxaborolane-2-yl-, polymer with 5,5''-[[3,4-bis[4-[[3,3'-diisobutyl]oxy]phenyl]-2,2'-bisopropenyl]di-1-methyl-2,1'-ethenediyl]bis[5''-bromo-2,2'-bithiophene] (CA INDEX NAME)

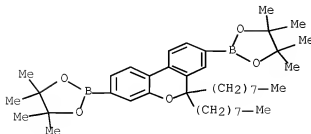
CM
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CFR 1140930-33-6
CMF C56 R62 R22 02 55



CM
2

CFR 68013-75-4
CMF C41 R64 R2 05



18 ANSWER 10 OF 48 CAPLUS COPYRIGHT 2010 ACS on STN
Accession Number
2009121645 CAPLUS File:stn
Document Number
156246018

Title
Azo-boraphenanthrene derivatives and oxa-boraphenanthrene derivatives, and organic electroluminescent device using them

Author/Inventor

Kang Myoung-Sun, Chae, Mi Yeong, Park, Jin Seong, Jung, Ho Guk, Kang, Uk Su
 Patent Assignee/Corporate Source
 Cheil Industries, Inc., S. Korea

Source

Repub. Korean Kongdae Tasho Kangdo, 41pp CODEN KR000A7

Document Type

Patent

Language

Korean

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2009008736	A	20090122	KR 2007-71932	20070718

Abstract

The title azo-boraphenanthrene derivs. or azo-boraphenanthrene derivs. can be expressed by chemical formula 1 (X = N or O, and R1 = null when X = O, B = boron, R1 - R10 are resp. selected from H, halogen, substituted or non-substituted alkyl, substituted or non-substituted allyl, substituted or non-substituted aryl, substituted or non-substituted arylamino, substituted or non-substituted heterocycloalkene, substituted or non-substituted heterocycloalkene, substituted or non-substituted C=, N- or S-containing heterocyclic group, substituted amino, nitril, nitro, halogen group, amido, and ester group, wherein the above groups can form cyclic compds. with adjacent groups and aliphatic or hetero-polymers cyclic). The above compds. play roles of electron hole injection, electron injection and transport, and light emission in organic light emitting devices with excellent light emitting efficiency, driving voltage, and safety

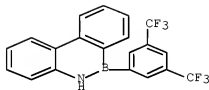
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CAS Registry Number

1115476-13-3 CAS#108

Chemical or Trade Name

Dibenz[*c,e*] [1,2]azaborine, 6-(3,5-bis(trifluoromethyl)phenyl)-5,6-dihydro- (CA INDEX NAME)

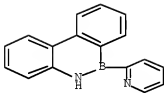


CAS Registry Number

1115476-16-8 CAS#108

Chemical or Trade Name

Dibenz[*c,e*] [1,2]azaborine, 5,6-dihydro-6-(2-pyridinyl)- (CA INDEX NAME)

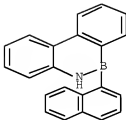


CAS Registry Number

1115476-19-2 CAS#108

Chemical or Trade Name

Dibenz[*c,e*] [1,2]azaborine, 5,6-dihydro-6-(1-naphthalenyl)- (CA INDEX NAME)

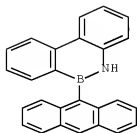


CAS Registry Number

1115476-23-7 CAS#108

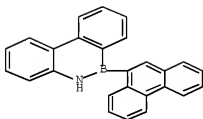
Chemical or Trade Name

Dibenz[*c,e*] [1,2]azaborine, 6-(9-anthracenyl)-5,6-dihydro- (CA INDEX NAME)



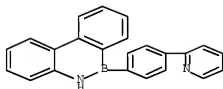
CAS Registry Number
1115476-26-2 CAGL05

Chemical or Trade Name
Dibenz[*a,e*] [1,2]azaborine, 5,6-dihydro-6-(9-phenanthrenyl)- ICA INDEX
NAME:



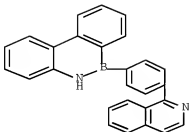
CAS Registry Number
1115476-28-5 CAGL05

Chemical or Trade Name
Dibenz[*a,e*] [1,2]azaborine, 5,6-dihydro-6-[4-(2-pyridinyl)phenyl]- ICA
INDEX NAME:



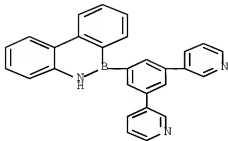
CAS Registry Number
1115476-31-7 CAGL05

Chemical or Trade Name
Dibenz[*a,e*] [1,2]azaborine, 5,6-dihydro-6-[4-(1-isoquinolyl)phenyl]- ICA
INDEX NAME:



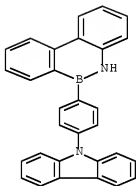
CAS Registry Number
1115476-33-1 CAGL05

Chemical or Trade Name
 Dibenz[*c,e*] [1,2]azaborine, 6-(3,5-di-3-pyridinylphenyl)-5,6-dihydro- (CA INDEX NAME)



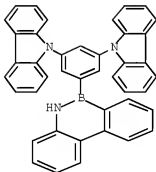
CAS Registry Number
 1115476-30-6 CAS#078

Chemical or Trade Name
 Dibenz[*c,e*] [1,2]azaborine, 6-[6-(9H-carbazol-9-yl)phenyl]-5,6-dihydro- (CA INDEX NAME)



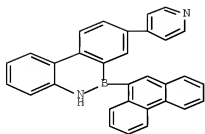
CAS Registry Number
 1115476-40-8 CAS#078

Chemical or Trade Name
 Dibenz[*c,e*] [1,2]azaborine, 6-(3,5-di-9H-carbazol-9-ylphenyl)-5,6-dihydro- (CA INDEX NAME)



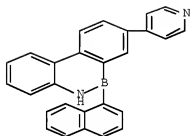
CAS Registry Number
 1115476-43-1 CAS#078

Chemical or Trade Name
 Dibenz[*c,e*] [1,2]azaborine, 5,6-dihydro-6-(9-phenanthrenyl)-8-(4-pyridinyl)- (CA INDEX NAME)



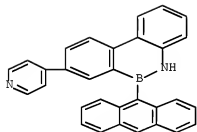
CAS Registry Number
1115476-46-6 CASNAME

Chemical or Trade Name
Dibenz[*c,e*] [1,2]oxaborine, 5,6-dihydro-6-(1-naphthalenyl)-8-(4-pyridinyl)-
(CA INDEX NAME)



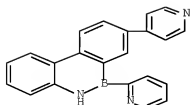
CAS Registry Number
1115476-49-7 CASNAME

Chemical or Trade Name
Dibenz[*c,e*] [1,2]oxaborine, 6-(2-anthracenyl)-5,6-dihydro-8-(4-pyridinyl)-
(CA INDEX NAME)



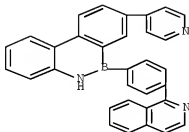
CAS Registry Number
1115476-52-5 CASNAME

Chemical or Trade Name
Dibenz[*c,e*] [1,2]oxaborine, 5,6-dihydro-6-(2-pyridinyl)-8-(4-pyridinyl)-
(CA INDEX NAME)



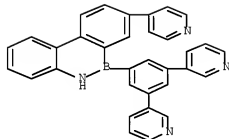
CAS Registry Number
1115476-55-5 CAS108

Chemical or Trade Name
Di benz[*c,e*] [1,2]azaborine, 5,6-dihydro-6-[4-(1-isoquinolyl)phenyl]-8-(4-pyridinyl)- (CA INDEX NAME)



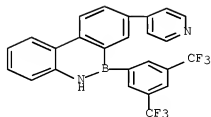
CAS Registry Number
1115476-58-8 CAS108

Chemical or Trade Name
Di benz[*c,e*] [1,2]azaborine, 6-(3,5-di-3-pyridinylphenyl)-5,6-dihydro-8-(4-pyridinyl)- (CA INDEX NAME)



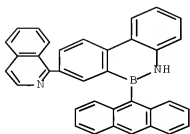
CAS Registry Number
1115476-61-8 CAS108

Chemical or Trade Name
Di benz[*c,e*] [1,2]azaborine, 6-[3,5-bis(trifluoromethyl)phenyl]-5,6-dihydro-8-(4-pyridinyl)- (CA INDEX NAME)



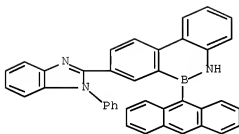
CAS Registry Number
1115476-64-8 CAS108

Chemical or Trade Name
Di benz[*c,e*] [1,2]azaborine, 6-(9-anthracenyl)-5,6-dihydro-8-(1-isoquinolyl)- (CA INDEX NAME)



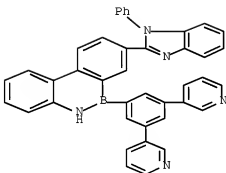
CAS Registry Number
1115476-67-9 CAMEL05

Chemical or Trade Name
Dibenz[e,h][1,2]azaborine, 6-(9-anthracenyl)-5,6-dihydro-8-(1-phenyl)-1H-benzimidazo[2-g]- (CA INDEX NAME)



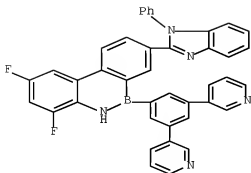
CAS Registry Number
1115476-70-6 CAMEL05

Chemical or Trade Name
Dibenz[e,h][1,2]azaborine, 6-(3,5-di-3-pyridinylphenyl)-5,6-dihydro-8-(1-phenyl)-1H-benzimidazo[2-g]- (CA INDEX NAME)



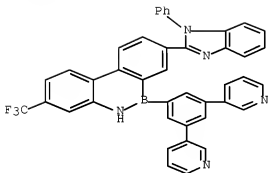
CAS Registry Number
1115476-73-7 CAMEL05

Chemical or Trade Name
Dibenz[e,h][1,2]azaborine, 6-(3,5-di-3-pyridinylphenyl)-2,4-difluoro-5,6-dihydro-8-(1-phenyl)-1H-benzimidazo[2-g]- (CA INDEX NAME)



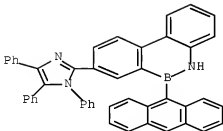
CAS Registry Number
1115476-76-0 CA9105

Chemical or Trade Name
Dibenz[e,l][1,2]azaborine, 6-(3,5-di-3-pyridinylphenyl)-5,6-dihydro-8-(1-phenyl-1H-benzimidazol-2-yl)-3-(trifluoromethyl)- (CA INDEX NAME)



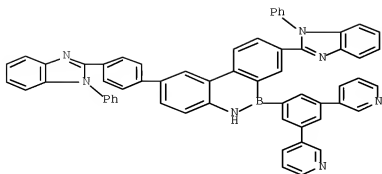
CAS Registry Number
1115476-79-3 CA9105

Chemical or Trade Name
Dibenz[e,l][1,2]azaborine, 6-(5-anthracenyl)-5,6-dihydro-8-(1,4,5-triphenyl-1H-imidazol-2-yl)- (CA INDEX NAME)



CAS Registry Number
1115476-82-9 CA9108

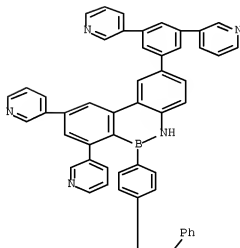
Chemical or Trade Name
Dibenz[e,l][1,2]azaborine, 6-(3,3-di-3-pyridinylphenyl)-5,6-dihydro-8-(1-phenyl-1H-benzimidazol-2-yl)-2-[4-(1-phenyl-1H-benzimidazol-2-yl)phenyl]- (CA INDEX NAME)



CAS Registry Number
1115476-05-1 CAS#05

Chemical or Trade Name
Gibberic acid derivative, 2-(3,5-di-3-pyrididinylphenyl)-5,6-dihydro-6-(4-(1-phenyl-1H-benzimidazol-2-yl)phenyl)-7,9-di-3-pyrididinyl- (CA 1000000000)

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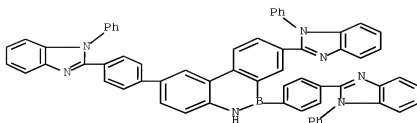


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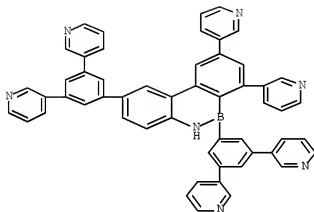
CAS Registry Number
1115476-05-1 CAS#05

Chemical or Trade Name
Gibberic acid derivative, 5,6-dihydro-8-(1-phenyl-1H-benzimidazol-2-yl)-2,6-bis(4-(2-phenyl-1H-benzimidazol-2-yl)phenyl)- (CA 1000000000)



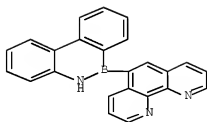
CAS Registry Number
1115476-92-2 CAS#105

Chemical or Trade Name
Dibenz[6,1]1,2]azaborine, 2,6-bis(3,5-di-3-pyridinylphenyl)-5,6-dihydro-7,9-di-3-pyridonyl- (CA INDEX NAME)



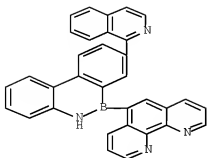
CAS Registry Number
1115477-09-2 CAS#105

Chemical or Trade Name
Dibenz[6,1]1,2]azaborine, 5,6-dihydro-6-(1,10-phenanthrolin-5-yl)- (CA INDEX NAME)



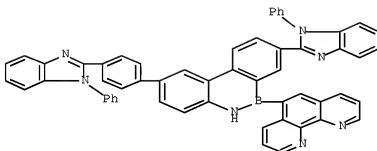
CAS Registry Number
1115477-12-7 CAS#105

Chemical or Trade Name
Dibenz[6,1]1,2]azaborine, 5,6-dihydro-8-(1-imquinoliziny)-6-(1,10-phenanthrolin-5-yl)- (CA INDEX NAME)



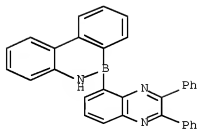
CAS Registry Number
1115477-15-9 CAS#08

Chemical or Trade Name
Dibenz[e,h]indeno[1,2-b]pyridine, 5,6-dihydro-6-(1,10-phenanthroline-5-yl)-8-(1-phenyl-1H-benzimidazol-2-yl)-2-[4-(3-phenyl-1H-benzimidazol-5-yl)phenyl]-
(CA INDEX NAME)



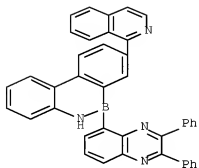
CAS Registry Number
1115477-19-8 CAS#08

Chemical or Trade Name
Dibenz[e,h]indeno[1,2-b]pyridine, 6-(12,3-diphenyl-5-quinoxaliny)-5,6-dihydro-
(CA INDEX NAME)



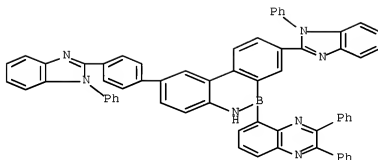
CAS Registry Number
1115477-21-8 CAS#08

Chemical or Trade Name
Dibenz[e,h]indeno[1,2-b]pyridine, 6-(2,3-diphenyl-5-quinoxaliny)-5,6-dihydro-6-(2-isoquinoliny)-
(CA INDEX NAME)



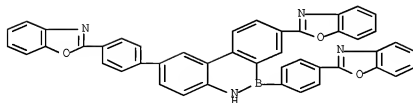
CAS Registry Number
1115477-25-2 CAGS/05

Chemical or Trade Name
Dibenz[e,h][1,2]azaborine, 6-(2,3-diphenyl-5-quinazolinyl)-5,6-dihydro-8-(1-phenyl-1H-benzotriazol-2-yl)-2-(4-(1-phenyl-1H-benzotriazol-2-yl)phenyl)- (CA INDEX NAME)



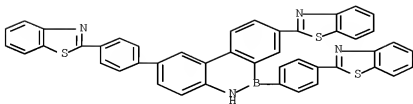
CAS Registry Number
1115477-27-8 CAGS/05

Chemical or Trade Name
Dibenz[e,h][1,2]azaborine, 8-(2-benzoxazolyl)-2,6-bis[6-(2-benzoxazolyl)phenyl]-5,6-dihydro- (CA INDEX NAME)



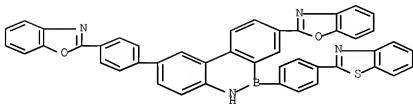
CAS Registry Number
1115477-31-0 CAGS/05

Chemical or Trade Name
Dibenz[e,h][1,2]azaborine, 8-(2-benzothiazolyl)-2,6-bis[6-(2-benzothiazolyl)phenyl]-5,6-dihydro- (CA INDEX NAME)



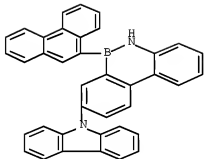
CAS Registry Number
1115477-14-3 CAPLIS

Chemical or Trade Name
Dibenz[1,2-a:4,5-b']bis(1,2,4-benzoxazole), 6-[4-(2-benzothiazolyl)phenyl]-5,6-dihydro- (CA INDEX NAME)



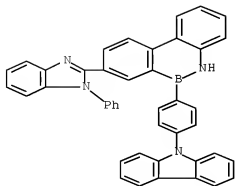
CAS Registry Number
1115477-37-6 CAPLIS

Chemical or Trade Name
Dibenz[1,2-a:4,5-b']bis(1,2,4-benzoxazole), 8-[9H-carbazol-9-yl]-5,6-dihydro-6-(9-phenanthrenyl)- (CA INDEX NAME)



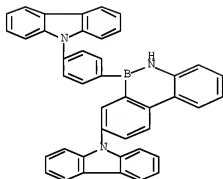
CAS Registry Number
1115477-39-8 CAPLIS

Chemical or Trade Name
Dibenz[1,2-a:4,5-b']bis(1,2,4-benzoxazole), 6-[4-(9H-carbazol-9-yl)phenyl]-5,6-dihydro-6-(1-phenyl-1H-benzazepin-2-yl)- (CA INDEX NAME)



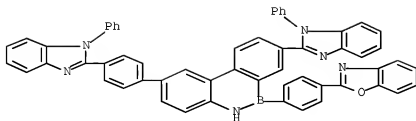
CAS Registry Number
1115477-42-5 CXP103

Chemical or Trade Name
Dibenz[*c,e*] [1,2]diazaborine, 6-[4-(9H-carbazol-9-yl)-6-phenyl-1H-benzimidazol-2-yl]-2-phenyl-1H-benzimidazol-2-yl]phenyl]-5,6-dihydro-8-(1-phenyl-1H-benzimidazol-2-yl)phenyl]-1,2-diazaborine (CA INDEX NAME)



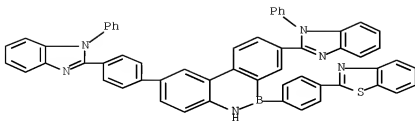
CAS Registry Number
1115477-46-9 CXP105

Chemical or Trade Name
Dibenz[*c,e*] [1,2]diazaborine, 6-[4-(2-benzothiazolyl)phenyl]-5,6-dihydro-8-(1-phenyl-1H-benzimidazol-2-yl)-2-[4-(1-phenyl-1H-benzimidazol-2-yl)phenyl]-1,2-diazaborine (CA INDEX NAME)



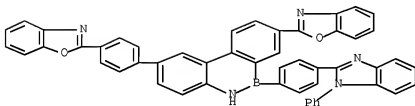
CAS Registry Number
1115477-49-0 CXP106

Chemical or Trade Name
Dibenz[*c,e*] [1,2]diazaborine, 6-[4-(2-benzothiazolyl)phenyl]-5,6-dihydro-8-(1-phenyl-1H-benzimidazol-2-yl)-2-[4-(1-phenyl-1H-benzimidazol-2-yl)phenyl]-1,2-diazaborine (CA INDEX NAME)



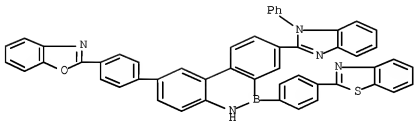
CAS Registry Number
1115477-51-6 CASL05

Chemical or Trade Name
Dibenz[*c,e*][1,2]oxazole, 8-(2-benzoxazolyl)-2-[4-(2-benzoxazolyl)phenyl]-
5,6-dihydro-6-[4-(1-phenyl-1*H*-benzimidazol-2-yl)phenyl]- (CA INDEX NAME)



CAS Registry Number
1115477-52-7 CASL05

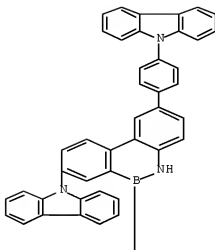
Chemical or Trade Name
Dibenz[*c,e*][1,2]oxazole, 6-[4-(2-benzoxazolyl)phenyl]-2-[4-(2-
benzoxazolyl)phenyl]-5,6-dihydro-8-(1-phenyl-1*H*-benzimidazol-2-yl)- (CA
INDEX NAME)



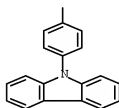
CAS Registry Number
1115477-53-5 CASL05

Chemical or Trade Name
Dibenz[*c,e*][1,2]oxazole, 8-(9*H*-acriden-9-yl)-2,6-bis[6-(9*H*-acriden-9-
yl)phenyl]-5,6-dihydro- (CA INDEX NAME)

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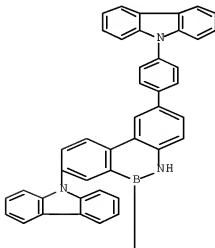
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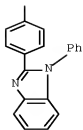


CAS Registry Number
1115417-60-5 CNFJ03

Chemical or Trade Name
Dibenz[*a,e*] [7,2]azaborine, 8-(9H-carbazol-9-yl)-2-[4-(9H-carbazol-9-yl)phenyl]-5,6-dihydro-4-[4-(1-phenyl-1H-benzimidazol-2-yl)phenyl]-10H

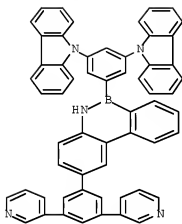
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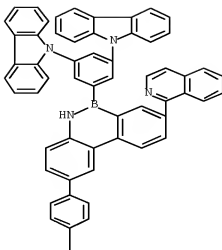
CAS Registry Number
1115477-63-8 CAS#03

Chemical or Trade Name
Dibenz[*c,e*]11,2-bisoxazole, 6-(3,5-di-9H-carbazol-9-ylphenyl)-2-(3,5-di-3-pyridinylphenyl)-5,6-dihydro- (CA INDEX NAME)



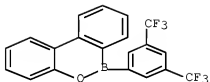
CAS Registry Number
1115477-66-1 CAS#03

Chemical or Trade Name
Dibenz[*c,e*]11,2-bisoxazole, 6-(3,5-di-9H-carbazol-9-ylphenyl)-2,4-bis(3-(2-isouquinoliny)-2-(2-(1,4-isouquinoliny)phenyl)- (CA INDEX NAME)



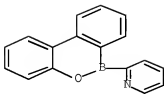
CAS Registry Number
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Chemical or Trade Name	
6H-Dibenz[<i>a,e</i>] [1,2]oxaboxin, 6-[3,5-bis(trifluoromethyl)phenyl]-	ICA
INDEX NAME	



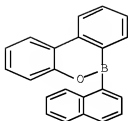
CAS Registry Number
1115477-78-5 CASLOS

Chemical or Trade Name
Pyridine, 2-(6H-dibenz[c,e][1,2]oxaborin-6-yl)- (CA INDEX NAME)



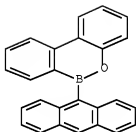
CAS Registry Number
1115477-81-0 CASLOS

Chemical or Trade Name
6H-Dibenz[c,e][1,2]oxaborin, 6-[1-naphthalenyl]- (CA INDEX NAME)



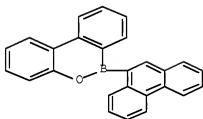
CAS Registry Number
1115477-85-4 CAS#00

Chemical or Trade Name
6B-Dibenz[e,h][1,2]osaborin, 6-(9-anthracenyl)- (CA INDEX NAME)



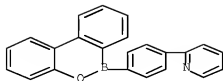
CAS Registry Number
1115477-88-9 CAS#00

Chemical or Trade Name
6B-Dibenz[e,h][1,2]osaborin, 6-(9-phenanthrenyl)- (CA INDEX NAME)



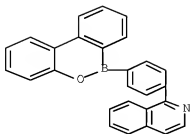
CAS Registry Number
1115477-91-2 CAS#00

Chemical or Trade Name
Pyridine, 2-{4-[(6B-dibenz[e,h][1,2]osaborin-6-yl)phenyl]}- (CA INDEX NAME)



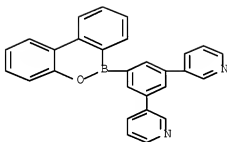
CAS Registry Number
1115477-94-5 CAS#00

Chemical or Trade Name
Imiquinolide, 1'-[4'-(6B-dibenz[e,h][1,2]osaborin-6-yl)phenyl]- (CA INDEX NAME)



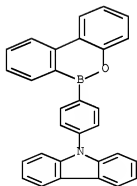
CAS Registry Number
1115471-96-7 CA9205

Chemical or Trade Name
Pyridine, 3,3'-[5-(6H-dibenzo[a,e][1,2]oxaborin-6-yl)-3,3-phenylene]bis-
(CA INDEX NAME)



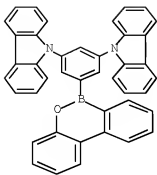
CAS Registry Number
1115471-98-9 CA9205

Chemical or Trade Name
9H-Carbazole, 9-[4-(6H-dibenzo[a,e][1,2]oxaborin-6-yl)phenyl]- (CA INDEX
NAME)



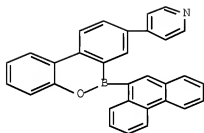
CAS Registry Number
1115471-99-8 CA9205

Chemical or Trade Name
9H-Carbazole, 9-[5-(6H-dibenzo[a,e][1,2]oxaborin-6-yl)-1,3-phenylene]bis-
(CA INDEX NAME)



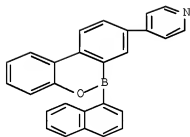
CAS Registry Number
1115478-02-8 CAS108

Chemical or Trade Name
Pyridine, 4-[6-(9-phenanthryl)]-6H-dibenz[e,h][1,2]oxaborin-8-yl- ICA
INDEX NAME:



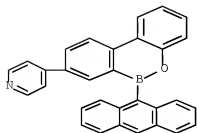
CAS Registry Number
1115478-04-0 CAS108

Chemical or Trade Name
Pyridine, 4-[6-(1-naphthalenyl)]-6H-dibenz[e,h][1,2]oxaborin-8-yl- ICA
INDEX NAME:



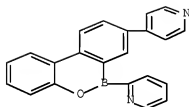
CAS Registry Number
1115478-06-8 CAS108

Chemical or Trade Name
Pyridine, 4-[6-(9-anthracenyl)]-6H-dibenz[e,h][1,2]oxaborin-8-yl- ICA
INDEX NAME:



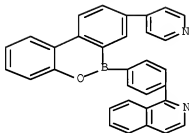
CAS Registry Number
1115478-08-6 CAS#08

Chemical or Trade Name
Pyridine, 2-[5-(4-pyridyl)-6H-dibenz[e,h][1,2]oxaborin-6-yl]- (CA INDEX NAME)



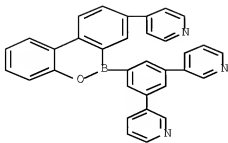
CAS Registry Number
1115478-10-8 CAS#108

Chemical or Trade Name
Isosquidoline, 1-[4-[5-(4-pyridyl)-6H-dibenz[e,h][1,2]oxaborin-6-yl]phenyl]- (CA INDEX NAME)



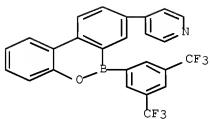
CAS Registry Number
1115478-11-9 CAS#109

Chemical or Trade Name
Pyridine, 3-[5-(3-pyridyl)-5-[5-(4-pyridyl)-6H-dibenz[e,h][1,2]oxaborin-6-yl]phenyl]- (CA INDEX NAME)



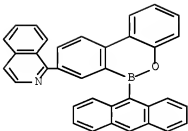
CAS Registry Number
1115478-12-0 CAQ105

Chemical or Trade Name
Pyridine, 4-((6-((2-methyl-2H-pyridin-2-yl)oxy)phenyl)-6H-dibenz[c,e][1,2]oxaborin-8-yl)- (CA INDEX NAME)



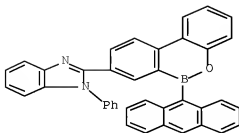
CAS Registry Number
1115478-13-0 CAQ105

Chemical or Trade Name
Imagotroloxin, 2-((6-((9-anthracenyl)-6H-dibenz[c,e][1,2]oxaborin-8-yl)-1-phenyl)- (CA INDEX NAME)



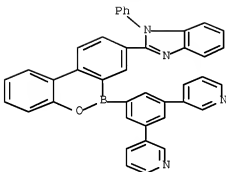
CAS Registry Number
1115478-14-0 CAQ105

Chemical or Trade Name
Imagotroloxin, 2-((6-((9-anthracenyl)-6H-dibenz[c,e][1,2]oxaborin-8-yl)-1-phenyl)- (CA INDEX NAME)



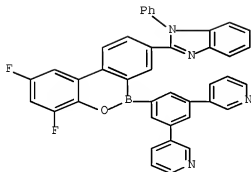
CAS Registry Number
1115470-15-3 CAZL05

Chemical or Trade Name
18-Benzimidazole, 2-[6-(3,5-di-3-pyridinylphenyl)-6H-
dibenz[c,e][1,2]oxaborin-8-yl]-1-phenyl- (CA INDEX NAME)



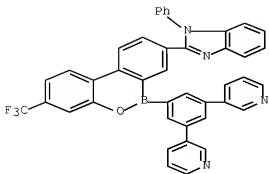
CAS Registry Number
1115470-16-6 CAZL05

Chemical or Trade Name
18-Benzimidazole, 2-[6-(3,5-di-3-pyridinylphenyl)-2,6-difluoro-6H-
dibenz[c,e][1,2]oxaborin-8-yl]-1-phenyl- (CA INDEX NAME)



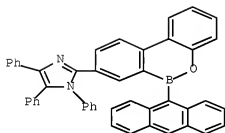
CAS Registry Number
1115470-18-5 CAZL05

Chemical or Trade Name
18-Benzimidazole, 2-[6-(3,5-di-3-pyridinylphenyl)-5-(trifluoromethyl)-6H-
dibenz[c,e][1,2]oxaborin-8-yl]-1-phenyl- (CA INDEX NAME)



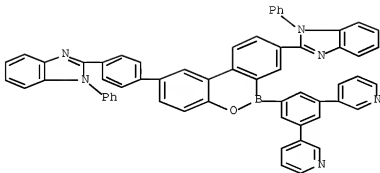
CAS Registry Number
1115478-19-7 CA9105

Chemical or Trade Name
18-Indazole, 2-[(6-{9-anthracenyl}-6H-dibenz[*c,e*][1,2]oxaborin-8-yl)-1,4,5-triphenyl]- (CA 1008 NAME)



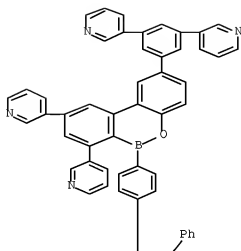
CAS Registry Number
1115478-22-2 CA9105

Chemical or Trade Name
18-Benzimidazole, 2-[(4-{6-{3,5-di-3-pyridinylphenyl}-8-(3-phenyl)-10-benzindazol-2-yl}-6H-dibenz[*c,e*][1,2]oxaborin-2-yl}phenyl)-1-phenyl]- (CA 1008 NAME)



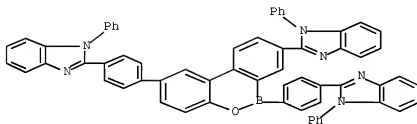
CAS Registry Number
1115478-24-6 CA9105

Chemical or Trade Name
18-Benzimidazole, 2-[(4-{6-{3,5-di-3-pyridinylphenyl}-7,9-di-3-pyridinyl-6H-dibenz[*c,e*][1,2]oxaborin-6-yl}phenyl)-1-phenyl]- (CA 1008 NAME)



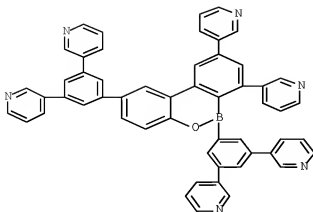
CAS Registry Number
1115470-26-8 CAS#08

Chemical or Trade Name
18-Benzimidazole, 2,2'-bis-[[3-(1-phenyl)-3H-benzimidazol-2-yl]-6H-
dibenz[*c,e*] [1,2]oxaborin-2,6-diyl]di-4,7-phenylene]bis[1-phenyl]- (CA
INDEX NAME)



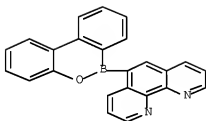
CAS Registry Number
1115470-27-7 CAS#08

Chemical or Trade Name
Pyridine, 3,3',5,5',3'',5'',,11,9-di-3-pyridinyl-4-(4-dibenz[*c,e*] [1,2]oxaborin-
2,6-diyl]di-5,1,3-benzosubstituted]tetrakis- (CA INDEX NAME)



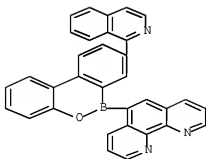
CAS Registry Number
1115478-40-8 CAS/DB

Chemical or Trade Name
1,10-Phenanthroline, 5-[(6-{[2-(4-pyridyl)phenyl]oxy}phenyl)-6-pyridyl]- (CA INDEX NAME)



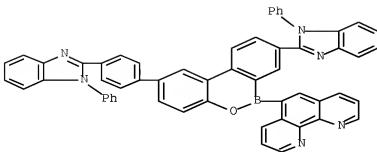
CAS Registry Number
1115478-42-6 CAS/DB

Chemical or Trade Name
1,10-Phenanthroline, 5-[(6-{[1-(isoquinolin-1-yl)phenyl]oxy}phenyl)-6-pyridyl]- (CA INDEX NAME)



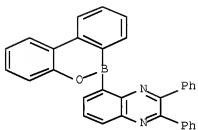
CAS Registry Number
1115478-43-9 CAS/DB

Chemical or Trade Name
1,10-Phenanthroline, 5-[(6-{[1-(2-phenyl-1H-benzimidazol-2-yl)phenyl]oxy}phenyl)-6-pyridyl]- (CA INDEX NAME)



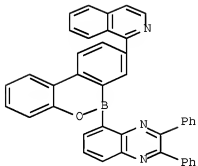
CAS Registry Number
1115478-47-5 CA1006X

Chemical or Trade Name
Quinoxaline, 5-[4-(2-phenyl-1H-benzimidazol-5-yl)-2,3-diphenyl]- (CA 1006X NAME)



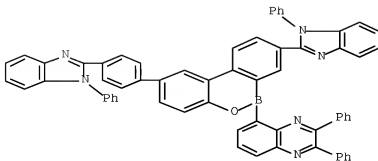
CAS Registry Number
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Chemical or Trade Name
Quinoxaline, 5-[5-(2-phenyl-1H-benzimidazol-5-yl)-6-phenyl]- (CA 1006X NAME)



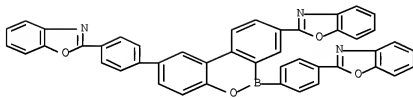
CAS Registry Number
1115478-51-7 CA1006X

Chemical or Trade Name
Quinoxaline, 2,3-bis(phenyl)-3-[5-(1-phenyl-1H-benzimidazol-2-yl)]-5-[4-(1-phenyl-1H-benzimidazol-2-yl)]-6-bis(phenyl)- (CA 1006X NAME)



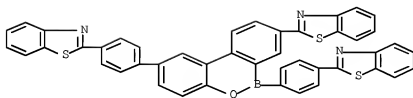
CAS Registry Number
1115478-63-8 CAINDEX

Chemical or Trade Name
Benzoazole, 2,2'-bis-[[8-(2-benzoselenolyl)-(6-hydroxy-1,2)oxaborin-2,6-diyl]di-4,1-phenylene]bis- (CA INDEX NAME)



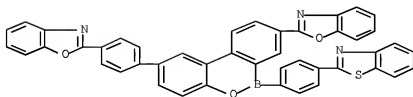
CAS Registry Number
1115478-55-1 CAINDEX

Chemical or Trade Name
Benzoazole, 2,2'-bis-[[8-(2-benzothiazolyl)-(6-hydroxy-1,2)oxaborin-2,6-diyl]di-4,1-phenylene]bis- (CA INDEX NAME)



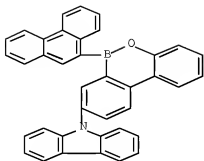
CAS Registry Number
1115478-56-2 CAINDEX

Chemical or Trade Name
Benzoazole, 2,2'-bis-[[8-(2-benzothiazolyl)-(6-hydroxy-1,2)oxaborin-2,6-diyl]di-4,1-phenylene]bis- (CA INDEX NAME)



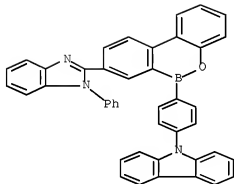
CAS Registry Number
1115478-59-5 CAINDEX

Chemical or Trade Name
Benzoazole, 2,2'-bis-[[8-(2-benzothiazolyl)-(6-hydroxy-1,2)oxaborin-2,6-diyl]di-4,1-phenylene]bis- (CA INDEX NAME)



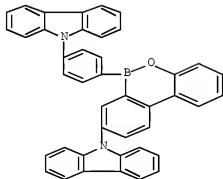
CAS Registry Number
1115478-61-3 CAS#03

Chemical or Trade Name
9B-Casbazole, 5-[4-(8-[1-phenyl-1H-benzimidazol-2-yl]-6H-
dibenz[*c,e*] [1,2]oxaborin-6-yl)phenyl]- (CA INDEX NAME)



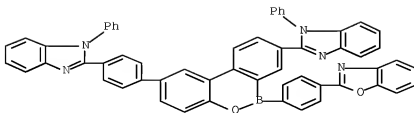
CAS Registry Number
1115478-63-1 CAS#03

Chemical or Trade Name
9B-Casbazole, 5-[4-(5-(9B-casbazol-9-yl)-6H-dibenz[*c,e*] [1,2]oxaborin-6-
yl)phenyl]- (CA INDEX NAME)



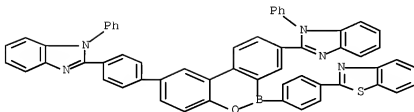
CAS Registry Number
1115478-64-2 CAS#03

Chemical or Trade Name
Benzoxazole, 2-[4-(8-[1-phenyl-1H-benzimidazol-2-yl]-2-[4-(1-phenyl-1H-
benzimidazol-2-yl)phenyl]-6H-dibenz[*c,e*] [1,2]oxaborin-6-yl)phenyl]- (CA
INDEX NAME)



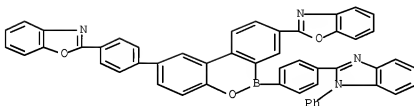
CAS Registry Number
1115470-66-8 CAPLUS

Chemical or Trade Name
Benzoazazole, 2-[4-[[5-(2-phenyl-1H-benzimidazol-2-yl)-2-[4-(2-phenyl-1H-benzimidazol-2-yl)phenyl]-6H-dibenz[5,4-b:1',2'-]oxabor[n-6-y]phenyl]]- (CA INDEX NAME)



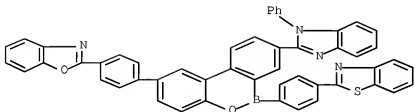
CAS Registry Number
1115470-68-6 CAPLUS

Chemical or Trade Name
Benzoazazole, 2-[4-[[5-(2-benzothiazolyl)phenyl]-6-[4-(2-phenyl-1H-benzimidazol-2-yl)phenyl]-6H-dibenz[5,4-b:1',2'-]oxabor[n-2-y]phenyl]]- (CA INDEX NAME)



CAS Registry Number
1115470-70-9 CAPLUS

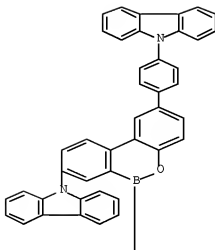
Chemical or Trade Name
Benzoazazole, 2-[4-[[5-(2-benzothiazolyl)phenyl]-6-(2-phenyl-1H-benzimidazol-2-yl)-6H-dibenz[5,4-b:1',2'-]oxabor[n-2-y]phenyl]]- (CA INDEX NAME)



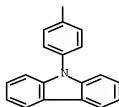
CAS Registry Number
1115470-73-5 CAPLUS

Chemical or Trade Name
9H-Carbazole, 9,9'-[[5-(9H-carbazol-5-yl)-6H-dibenz[5,4-b:1',2'-]oxabor[n-2,6-diyl]]di-4,1'-phenylene]bis- (CA INDEX NAME)

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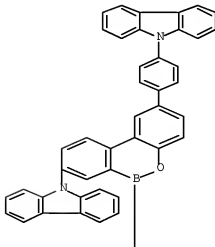
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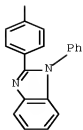


CAS Registry Number
1115478-76-6 CAMELUS

Chemical or Trade Name
99-Carbazole, 9-[4-(9-(9H-carbazol-9-yl)-6-[4-(1-phenyl-1H-benzimidazol-2-yl)phenyl]-6H-dibenz[e,1,2]oxaborin-2-yl)phenyl]- (CA INDEX NAME)

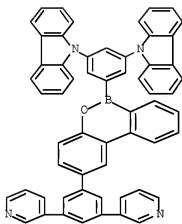
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CAS Registry Number
1115470-79-3 CAS#03

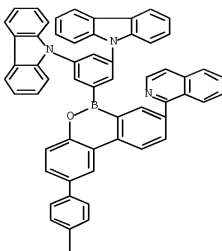
Chemical or Trade Name
9H-Carbazole, 9,9'-bis-[2-(3,5-di(1-3-pyridinyl)phenyl)-6H-
dibenz[*a,e*]1,2]carbazin-6-yl]-1,3-phenylene]bis- (CA INDEX NAME)



CAS Registry Number
1115470-83-3 CAS#03

Chemical or Trade Name
9H-Carbazole, 9,9'-bis-[1-(1-isopropylvinyl)-2-[4-(1-isopropylvinyl)phenyl]-
6H-dibenz[*a,e*]1,2]carbazin-6-yl]-2,3-phenylene]bis- (CA INDEX NAME)

PAGE 1-A

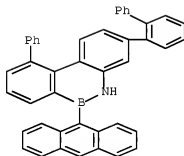


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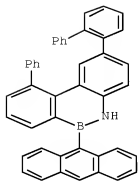
CAS Registry Number
1115478-92-6 CMEJ03

Chemical or Trade Name
Dibenz[*c,e*][1,2]azaborine, 6-(9-anthracenyl)-2-[1,1'-biphenyl]-2-yl-5,6-dihydro-10-phenyl- (CA, RTEOX 3000)



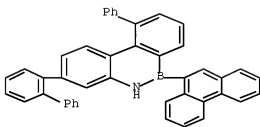
CAS Registry Number
1115478-95-9 CMEJ03

Chemical or Trade Name
Dibenz[*c,e*][1,2]azaborine, 6-(9-anthracenyl)-2-[1,1'-biphenyl]-2-yl-5,6-dihydro-10-phenyl- (CA, RTEOX 3000)



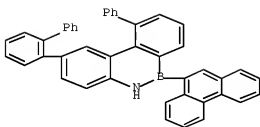
CAS Registry Number
1115478-07-1 CAINDEX

Chemical or Trade Name
Dibenz[1,2]azaborine, 3-[1,1'-biphenyl]-2-yl-5,6-dihydro-6-(9-phenanthrenyl)-10-phenyl- (CA INDEX NAME)



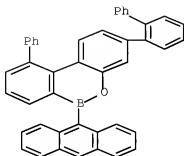
CAS Registry Number
1115478-98-2 CAINDEX

Chemical or Trade Name
Dibenz[1,2]azaborine, 2-[1,1'-biphenyl]-2-yl-5,6-dihydro-6-(9-phenanthrenyl)-10-phenyl- (CA INDEX NAME)



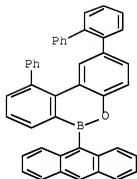
CAS Registry Number
1115479-01-0 CAINDEX

Chemical or Trade Name
8b-Dibenz[1,2]azaborine, 6-(9-phenanthrenyl)-3-[1,1'-biphenyl]-2-yl-10-phenyl- (CA INDEX NAME)



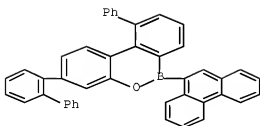
CAS Registry Number
1115479-02-8 CAS#08

Chemical or Trade Name
6B-Dibenz[e,f][1,2]osazolin, 6-(9-anthracenyl)-2-([1,1'-biphenyl]-2-yl)-10-phenyl- (CA INDEX NAME)



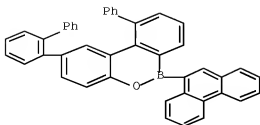
CAS Registry Number
1115479-09-7 CAS#08

Chemical or Trade Name
6B-Dibenz[e,f][1,2]osazolin, 3-([1,1'-biphenyl]-2-yl)-6-(9-phenanthrenyl)-10-phenyl- (CA INDEX NAME)



CAS Registry Number
1115479-11-2 CAS#08

Chemical or Trade Name
6B-Dibenz[e,f][1,2]osazolin, 2-([1,1'-biphenyl]-2-yl)-6-(9-phenanthrenyl)-10-phenyl- (CA INDEX NAME)



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Accession Number
2008 1536783 CAPLUS [Full Text](#)

Document Number
150 86349

Title
Blue phosphorescent iridium complexes and light-emitting devices using them

Author/Inventor
Kopylov, David B.; Lin, Chun; Mackenzie, Peter; Borden, Tsai, Jui-Yi; Waters, Robert; Beers, Scott A.; Brown, Cory S.; Yeager, Walter H.; Baron, Edward

Patent Assignee/Corporate Source
Universal Display Corporation, USA

Source
PCT Int. Appl. 2006pp CODEN: PXXXX2

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Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WVO 2006156879	A1	20061224	WVO 2006-US54297	20060307
US 20080297033	A1	20081204	US 2006-44605	20060307

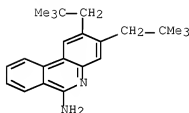
Abstract

Iridium complexes are described by the general formula I (n = 1, 2 or 3; R1a, R1b, R1c, R1d, R1e, R1f, R1g, R1h, and R1i = independently selected hydrocarbyl, heteroatom substituted hydrocarbyl, cyano, fluoro, OR2a, SR2a, NR2aR2b, BR2aR2b, or SiR2aR2bR2c, where R2a-c = independently selected hydrocarbyl or heteroatom substituted hydrocarbyl, and where any two of R1a and R2a-c may be linked to form a saturated or unsaturated aromatic or non-aromatic ring, and X-Y = an ancillary ligand). Organic light emitting devices comprising selected complexes are also described.

HR Structure

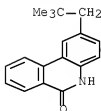
CAS Registry Number
1089735-06-7 CAPLUS

Chemical or Trade Name
6-Phenanthridinone, 2,3-bis(2,2-dimethylpropyl)- (CA INDEX NAME)



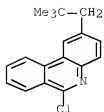
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Chemical or Trade Name
6-Phenanthridinone, 2-(2,2-dimethylpropyl)- (CA INDEX NAME)



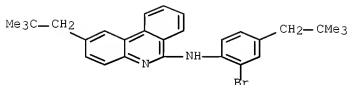
CAS Registry Number
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Chemical or Trade Name
Phenanthridine, 6-chloro-2-(2,2-dimethylpropyl)- (CA INDEX NAME)



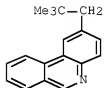
CAS Registry Number
1089733-11-8 CAZUS

Chemical or Trade Name
6-Fluoranthridine, N-(2-bromo-4-(2,2-dimethylpropyl)phenyl)-2-(2,2,2-trimethylpropyl)- (CA INDEX NAME)



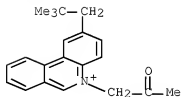
CAS Registry Number
1089733-29-6 CAZUS

Chemical or Trade Name
Phenanthridine, 2-(2,2-dimethylpropyl)- (CA INDEX NAME)



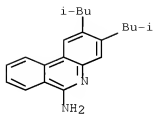
CAS Registry Number
1089733-30-3 CAZUS

Chemical or Trade Name
Phenanthridine, 2-(2,2-dimethylpropyl)-5-(2-oxypropyl)-, bromide (1:1) (CA INDEX NAME)



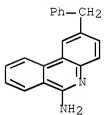
CAS Registry Number
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Chemical or Trade Name
6-Fluoranthridine, 2,2-bis(2-methylpropyl)- (CA INDEX NAME)



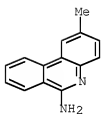
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Chemical or Trade Name
6-Phenanthridinecarboxamide, 2-(2-isobutyl-5-isobutylphenyl)- (CA INDEX NAME)



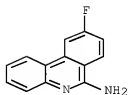
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Chemical or Trade Name
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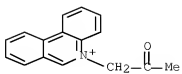
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Chemical or Trade Name
6-Phenanthridinecarboxamide, 9-fluoro- (CA INDEX NAME)



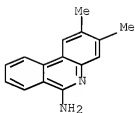
CAS Registry Number
947454-04-4 CAC170

Chemical or Trade Name
Phenanthridinium, 5-(2-methoxypropyl)-, chloride (1:1) (CA INDEX NAME)



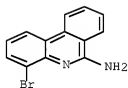
CAS Registry Number
946147-03-1 CAS105

Chemical or Trade Name
6-Phenanthridinamine, 2,3-dimethyl- (CA INDEX NAME)



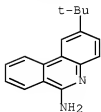
CAS Registry Number
946147-06-4 CAS105

Chemical or Trade Name
6-Phenanthridinamine, 4-bromo- (CA INDEX NAME)



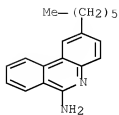
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Chemical or Trade Name
6-Phenanthridinamine, 2-(1,1-dimethylethyl)- (CA INDEX NAME)



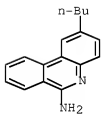
CAS Registry Number
946147-24-6 CAS105

Chemical or Trade Name
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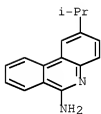
CAS Registry Number
946147-30-9 CAPLOS

Chemical or Trade Name
6-Phenanthridinamine, 2-butyl- (CA INDEX NAME)



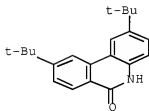
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Chemical or Trade Name
6-Phenanthridinamine, 2-[1-methylethyl]- (CA INDEX NAME)



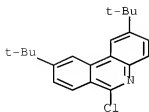
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Chemical or Trade Name
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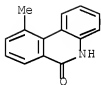
CAS Registry Number
946147-36-0 CAPLOS

Chemical or Trade Name
Phenanthridine, 6-chloro-2,9-bis(1,1-dimethylethyl)- (CA INDEX NAME)



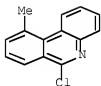
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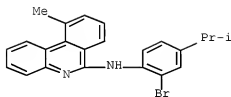
CAS Registry Number
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Chemical or Trade Name
Fluorenone, 6-methyl-10-methyl- (CA INDEX NAME)



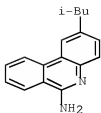
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Chemical or Trade Name
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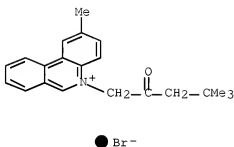
CAS Registry Number
1089754-09-2 CAS105

Chemical or Trade Name
6-Fluorenylidene-2-(2-methylpropyl)- (CA INDEX NAME)



CAS Registry Number
145733-46-3 CAPLUS

Chemical or Trade Name
Phenanthrodimine, 5-(4,4-dimethyl-2-oxyphenyl)-2-methyl-, bromide (1:1)
(CA INDEX NAME)



CS CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)

LS ANSWER 12 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number
2008 145707 CAPLUS [Full Text](#)
Document Number
150 43959

Title
Blue phosphorescent iridium complexes and light-emitting devices using them

Author/Inventor
Kowale, David B.; Lin, Chun, MacKenzie, Peter B.; Tsai, Ju-Yi; Walters, Robert W.; Beers, Scott; Brown, Cory S.; Yeager, Walter; Baron, Edward
Patent Assignee/Corporate Source
Universal Display Corporation, USA

Source
U.S. Pat. Appl. Publ., 130 pp., Cont. in-part of U.S. Ser. No. 704,565 CODEN: USXXXX

Document Type
Patent
Language
English
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20080297033	A1	20081204	US 2008-44605	20080307
US 2007190359	A1	20070816	US 2007-704555	20070209
EP 1981690	A2	20081022	EP 2007-750406	20070209
JP 2009526071	T	20090716	JP 2008-554393	20070209
WO 2008156879	A1	20081224	WO 2008-US56297	20080307
IN 2008IN06359	A	20081024	IN 2008-IN6353	20080721
KR 2008080489	A	20081110	KR 2008-719429	20080807
CN 101415718	A	20090422	CN 2007-80008533	20080910

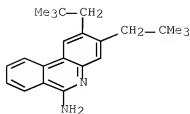
Abstract

Iridium complexes are described by the general formula I (n = 1, 2, or 3, R1a, R1b, R1c, R1d, R1e, R1f, R1g, R1h, and R1i = independently selected hydrocarbyl, heteroatom substituted hydrocarbyl, cyano, fluoro, OR2a, OR2b, NR2aR2b, BR2aR2b, or OR2cR2dR2e, where R2a = independently selected hydrocarbyl or heteroatom substituted hydrocarbyl, and where any two of R1a and R2a may be linked to form a saturated or unsaturated, aromatic or non-aromatic ring, and X-Y = an ancillary ligand). Organic light emitting devices comprising selected complexes are also described.

Hit Structure

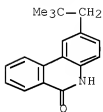
CAS Registry Number
145733-46-3 CAPLUS

Chemical or Trade Name
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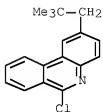
CAS Registry Number
1489731-09-5 CAS#05

Chemical or Trade Name
6-(2,2-dimethylpropyl)-2-phenanthridinamine (CA INDEX NAME)



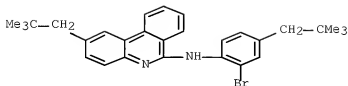
CAS Registry Number
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Chemical or Trade Name
Phenanthridine, 6-chloro-2-(2,2-dimethylpropyl)- (CA INDEX NAME)



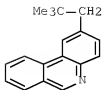
CAS Registry Number
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Chemical or Trade Name
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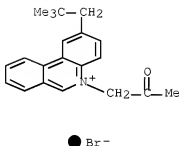
CAS Registry Number
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Chemical or Trade Name
Phenanthridine, 2-(2,2-dimethylpropyl)- (CA INDEX NAME)



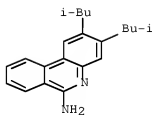
CAS Registry Number
109735-39-7 CAZLUS

Chemical or Trade Name
Phenanthridinium, 2-(2,2-dimethylpropyl)-5-(2-oxypropyl)-, bromide (1:1)
(CA INDEX NAME)



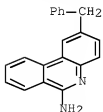
CAS Registry Number
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Chemical or Trade Name
6-Phenanthridinium, 2-bis[2-methylpropyl]- (CA INDEX NAME)



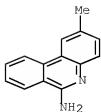
CAS Registry Number
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Chemical or Trade Name
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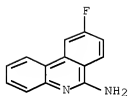
CAS Registry Number
895823-20-8 CAZLUS

Chemical or Trade Name
6-Phenanthridine, 2-methyl- (CA INDEX NAME)



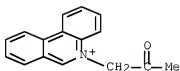
CAS Registry Number
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Chemical or Trade Name
6-Phenanthridinamine, 3-fluoro- (CA INDEX NAME)



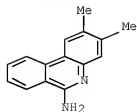
CAS Registry Number
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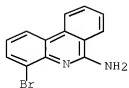
CAS Registry Number
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Chemical or Trade Name
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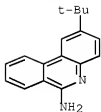
CAS Registry Number
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Chemical or Trade Name
6-Phenanthridinamine, 4-bromo- (CA INDEX NAME)



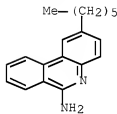
CAS Registry Number
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Chemical or Trade Name
6-Phenanthridinamine, 2-(1,1-dimethylethyl)- (CA INDEX NAME)



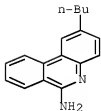
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Chemical or Trade Name
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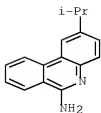
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Chemical or Trade Name
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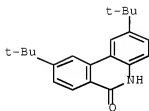
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Chemical or Trade Name
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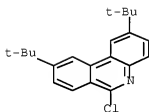
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Chemical or Trade Name
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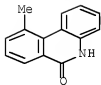
CAS Registry Number
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Chemical or Trade Name
Phenanthridine, 6-chloro-2,9-bis(1,1,2-dimethylethyl)- (CA INDEX NAME)



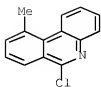
CAS Registry Number
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Chemical or Trade Name
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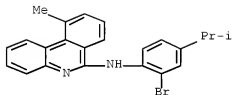
CAS Registry Number
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Chemical or Trade Name
Phenanthridine, 6-chloro-10-methyl- (CA INDEX NAME)



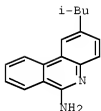
CAS Registry Number
946147-42-5 CAS105

Chemical or Trade Name
6-Phenanthridine, N-[2-bromo-4-(1-methyl-ethyl)phenyl]-10-methyl- (CA INDEX NAME)



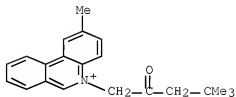
CAS Registry Number
1469714-93-5 CAS105

Chemical or Trade Name
6-Phenanthridine, 2-(2-methylpropyl)- (CA INDEX NAME)



CAS Registry Number
1089735-46-5 CAS108

Chemical or Trade Name
Phenanthridine, 5-(4,4-dimethyl-2-octenyl)-2-methyl-, bromide (1:1) (CA INDEX NAME)



OF CITING REF COUNT: 1 THERE ARE 1 CAS/IN RECORDS THAT CITE THIS RECORD (2 CITINGS)

Accession Number 2008197717 CAPLUS Full-text

Document Number 14837740

Title

Polymeric light emitting materials for thin films, light emitting devices, plasma light sources, display devices, organic transistors and solar cells

Author/Inventor

Naguchi, Takamitsu, Suzuki, Tomoyuki

Patent Assignee/Corporate Source

Suntomo Chemical Company, Limited, Japan

Source

PCT Int. Appl., 76pp. CODEN: PUXOD2

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006/140057	A1	20061120	WO 2006/JF58664	20060909
JP 200808671	A	20081225	JP 2006-123576	20060909
EP 2154174	A1	20100217	EP 2006-752547	20060909

Abstract

The polymer compounds comprise a repeating unit (I) and/or a repeating unit (II), wherein R¹, R², R³, R⁴ = Ph or substituent and R¹, R², R³, R⁴ = H or substituent. Thus, 0.617 g 2,7-dibromo-9,9-dimethyl-6H-fluorene and 0.400 g 2,2'-(1-phenyl-1,2-ethenediyl)bis(4,4,5,5-tetramethyl-1,3,2-dioxaborolane) were polymerized in the presence of dichlorobis(diphenylphosphino)ethane and Alkylal 338 to give a copolymer (I) (4 + 10), fluorescence at 462 nm, and relative fluorescence intensity 5.1.

HM Structure

CAS Registry Number

14837713-59-3 CAPLUS

Chemical or Trade Name

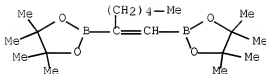
6H-fluorene-9,9-dipyrromethene, 3,9-dibromo-6,6-diethyl-, polymer with 2,2'-(1-phenyl-1,2-ethenediyl)bis(4,4,5,5-tetramethyl-1,3,2-dioxaborolane) (CA 2006X 5866)

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CR1 1092741-59-3

CMF C19 R36 R2 04

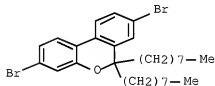


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CAS Registry Number

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Chemical or Trade Name

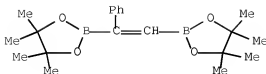
6H-fluorene-9,9-dipyrromethene, 3,9-dibromo-6,6-diethyl-, polymer with 2,2'-(1-phenyl-1,2-ethenediyl)bis(4,4,5,5-tetramethyl-1,3,2-dioxaborolane) (CA 2006X 5866)

OK

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CR1 916659-90-2

CMF C20 R30 R2 04

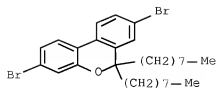


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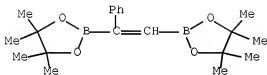


CAS Registry Number
1082173-91-8 CAS/LOS

Chemical or Trade Name
6R-Dibenzob[4,4]pyran, 3,8-dibromo-6,6-bis[4-(1,1-dimethylethyl)phenyl]-, polymer with 2,2'-(1-phenyl-1,2-ethenediyl)bis[4,4,5,5-tetramethyl-1,3,2-dioxaborolane] (CA INDEX NAME)

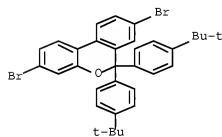
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CMF 033 H52 Hc2 0

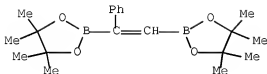


CAS Registry Number
1082173-93-0 CAS/LOS

Chemical or Trade Name
6R-Dibenzob[4,4]pyran, 3,8-dibromo-6,6-diethyl-, polymer with 2,2'-(1-phenyl-1,2-ethenediyl)bis[4,4,5,5-tetramethyl-1,3,2-dioxaborolane] (CA INDEX NAME)

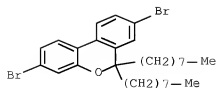
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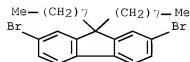
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CFR 688013-66-3
CMF 029 H40 Hc2 0



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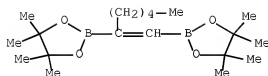


CAS Registry Number
1002713-00-3 CMF108

Chemical or Trade Name
6h-Cibenzotriazopyran, 3,9-dibromo-6,6-diethyl-, polymer with
2,7-dibromo-9,9-bis[4-(4-bromophenyl)-2-methyl-2-oxopropyl]fluorene and
2,2'-(1,1'-naphthyl-4,4'-diyl)bis[4,4',5,5'-tetracarboxyl-1,3,2-dioxabenzolene]
(CA 10684 H086)

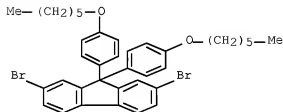
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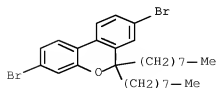
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CMF C29 B40 Bz2 0



CAS Registry Number
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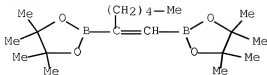
Chemical or Trade Name
1,4-benzenedibis[2,2'-(4,4'-bis[4-(4-bromophenyl)-2-methyl-2-oxopropyl]-1,1'-naphthyl)-2,2'-dioxabenzolene]
polymer with 3,9-dibromo-6,6-diethyl-2H-dibenzotriazopyran

2,2'-(9,9-dioctyl-9H-fluorene-2,7-diyl)bis[1,3,2-dioxaborolane] and
2,2'-(1-pentyl-1,2-methenediyl)bis[1,3,2-dioxaborolane], block (CA 33036X 30986)

CM

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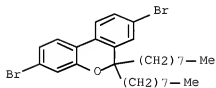
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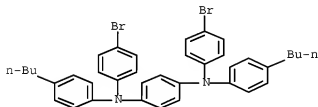
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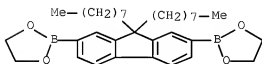
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CM

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CFR 210347-49-2
CMF C13 H49 B2 O4



18 ANSWER 14 OF 46 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number
2008 1218872 CAPLUS [Full-text](#)
Document Number
148.520961

Title Phosphaphenanthrene-based organic light-emitting compound and organic electroluminescent element using the compound

Author/Inventor Jung Gwang Chul; Cho, Hyean Nam; Park, Ik Gye; Yoo, Ji Hun; Hyun, Ae Ran; Jung, Yun Ho
Patent Assignee/Corporate Source Inktech Co., Ltd., S Korea

Source Repub: Korean Kongkwa Taisho Kangbo, 30pp CODEN KR00XA7

Document Type Patent

Language Korean

Patent Information

PATENT NO	KIND	DATE	APPLICATION NO	DATE
KR 2008091036	A	20081009	KR 2008-31843	20080404
WO 2008123722	A1	20081016	WO 2008 KR1943	20080405
EP 2134808	A1	20091222	EP 2008-741193	20080405

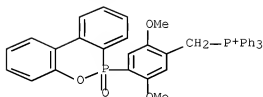
Abstract

The title phosphaphenanthrene-based organic light-emitting compound is shown with chemical formula I (L1 = a chemical bond, C6-30 arylene, etc.; L2 = C6-30 arylene, 2-30 heteroarylene, etc.; R1 = C1-22 alkyl, C6-30 aryl, C2-30 heteroaryl, halogen, etc.; R2-R9 = hydrogen, C1-22 alkyl, C1-22 alkoxyl containing oxygen, nitrogen, or sulfur, C1-22 alkoxyl, C3-22 cytoalkyl, etc.). Thus, e.g., an OLED based on phosphaphenanthrene II (preparation given) exhibited the following characteristics: turn-on 3.4 V, E Q E: 1.56, 2.66 cd/A, 1.13 lm/W, CIE (0.16, 0.16), and ELmax: 450 nm

HR Structure

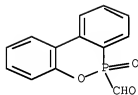
CAS Registry Number
1073501-36-6 CAS#08

Chemical or Trade Name
Phosphonium, [(2,5-dimethoxy-4-(6-oxido-6H-dibenz[*a,e*][1,2]oxaphosphorin-6-yl)phenyl)methyl]triphenyl-, bromide (1:1) ICA INDEX NAME



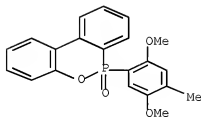
CAS Registry Number
1073501-45-7 CAS#08

Chemical or Trade Name
6H-Dibenz[*a,e*][1,2]oxaphosphorin-6-carboxaldehyde, 6-oxide ICA INDEX NAME



CAS Registry Number
1073501-38-6 CAS#08

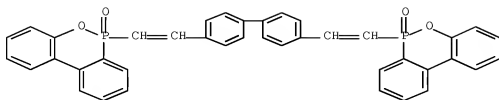
Chemical or Trade Name
6H-Dibenz[*a,e*][1,2]oxaphosphorin, 6-(2,5-dimethoxy-4-methylphenyl)-, 6-oxide ICA INDEX NAME



CAS Registry Number
1073501-39-5 CAS#08

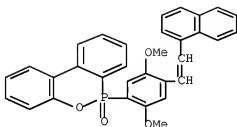
Chemical or Trade Name
6H-Dibenz[*a,e*][1,2]oxaphosphorin, 6-(4-(bromomethyl)-2,5-dimethoxyphenyl)-, 6-oxide ICA INDEX NAME

6R-Dibenz[*a,e*] [3,2]oxaphosphorin, 6,6'--([1,1'-biphenyl]-4,4'-diylid-2,1-ethenediyl)bis-, 6,6'--dioxide (CA INDEX NAME)



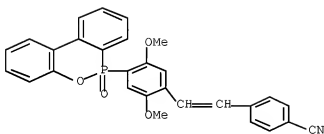
CAS Registry Number
1073561-90-9 CAINDEX

Chemical or Trade Name
6R-Dibenz[*a,e*] [3,2]oxaphosphorin, 6-(2,5-dimethoxy-6-[2-(1-naphthalenyl)ethenyl]phenyl)-, 6-oxide (CA INDEX NAME)



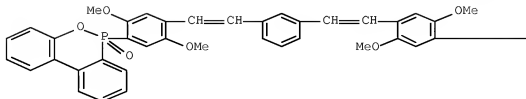
CAS Registry Number
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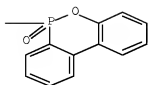
Chemical or Trade Name
Benzoxazole, 4-([2-(2,5-dimethoxy-6-(6-oxido-6R-dibenz[*a,e*] [3,2]oxaphosphorin-6-yl)phenyl)ethenyl]- (CA INDEX NAME)



CAS Registry Number
1073561-60-2 CAINDEX

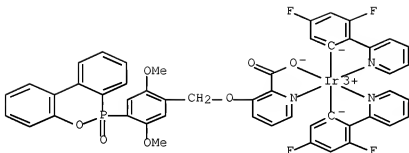
Chemical or Trade Name
6R-Dibenz[*a,e*] [3,2]oxaphosphorin, 6,6'--([1,1'-phenylene]di[2,1-ethenediyl(2,5-dimethoxy-4,1-phenylene)])bis-, 6,6'--dioxide (CA INDEX NAME)





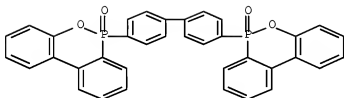
CAS Registry Number
1073501-42-3 CAGS.08

Chemical or Trade Name
Iridium, [3-[(2,5-dimethoxy-4-(6-oxido-6H-dibenz[1,2]oxaphosphorin-6-yl)phenyl)methoxy]-2-pyridinecarboxylato-κO1,κO2]bis[3,5-difluoro-2-(2-pyridinyl)-κO1]phenyl-κC1]- (CA 3006X NAME)



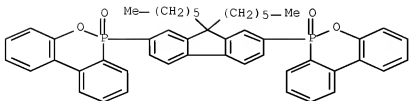
CAS Registry Number
1073501-42-6 CAGS.08

Chemical or Trade Name
6H-Dibenz[1,2]oxaphosphorin, 6,6'-bis-[(1,3-bisphenyl)-4,4'-diylbis-, 6,6'-diide (CA 3006X NAME)



CAS Registry Number
1073501-43-3 CAGS.08

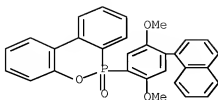
Chemical or Trade Name
6H-Dibenz[1,2]oxaphosphorin, 6,6'-bis-(5,9-dihexyl-9H-fluorene-2,7-diyl)bis-, 6,6'-diide (CA 3006X NAME)



CAS Registry Number
1073501-46-8 CAGS.08

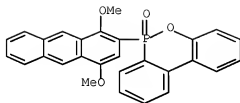
Chemical or Trade Name
6H-Dibenz[1,2]oxaphosphorin, 6-(2,5-dimethoxy-6-(1-

naphthalenyl]phenyl]-, 6-oxide (CA INDEX NAME)



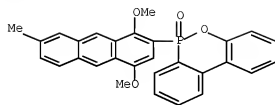
CAS Registry Number
1073501-40-0 CME/08

Chemical or Trade Name
6-(2,6-dimethoxy-3-(naphthalen-1-yl)phenyl)-1,2-dioxaphosphorin, 6-(1,6-dimethoxy-2-anthracenyl)-, 6-oxide (CA INDEX NAME)



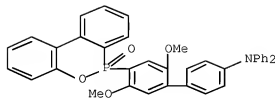
CAS Registry Number
1073501-49-1 CME/08

Chemical or Trade Name
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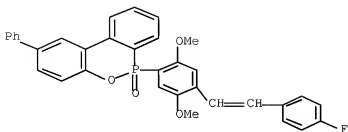
CAS Registry Number
1073501-50-6 CME/08

Chemical or Trade Name
[1,1'-Biphenyl]-4-oxide, 2',5'-dimethoxy-4'-(6-oxide-6H-dibenz[*a,h*] [1,2]oxaphosphorin-6-yl)-N,N-diphenyl- (CA INDEX NAME)



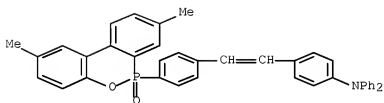
CAS Registry Number
1073500-92-1 CME/08

Chemical or Trade Name
6-(2,5-dimethoxy-2'-phenyl)-1,2-dioxaphosphorin, 6-(4-[3-(4-fluorophenyl)ethenyl]-2,5-dimethoxyphenyl)-2-phenyl-, 6-oxide (CA INDEX NAME)



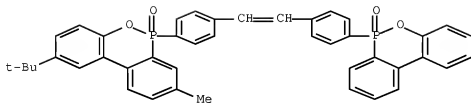
CAS Registry Number
1073500-93-2 CAGL08

Chemical or Trade Name
Benzenamine, 4-[2-[4-(2,6-dimethyl-6-oxido-6H-
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INDEX NAME)



CAS Registry Number
1073500-94-3 CAGL08

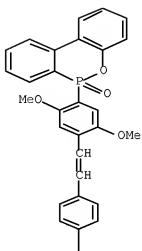
Chemical or Trade Name
46-Dibenz[e,h][1,2]oxaphosphorin, 2-(2,1-dimethylethyl)-8-methyl-6-[4-(2-(
4-(6-oxido-6H-dibenz[e,h][1,2]oxaphosphorin-6-yl]phenyl)ethenyl]phenyl)-,
6-oxide (CA INDEX NAME)



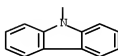
CAS Registry Number
1073500-95-4 CAGL08

Chemical or Trade Name
98-Cateazole, 5-[4-[2-[2,5-dimethoxy-4-(6-oxido-6H-
dibenz[e,h][1,2]oxaphosphorin-6-yl]phenyl]ethenyl]phenyl]- (CA INDEX
NAME)

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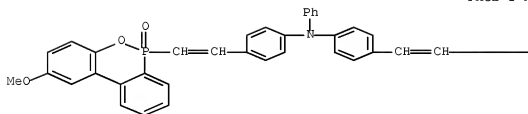
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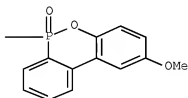
CAS Registry Number
1073500-96-5 CASNAME

Chemical or Trade Name
Benzoxaphosphine, 4-[2-[2-methoxy-6-oxido-6H-dibenz[*a,e*][1,2]oxaphosphorin-6-yl]ethenyl]-9-[4-[2-[2-methoxy-6-oxido-6H-dibenz[*a,e*][1,2]oxaphosphorin-6-yl]ethenyl]phenyl]-N-phenyl- [CA INDEX NAME]

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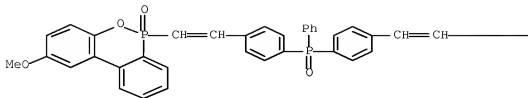
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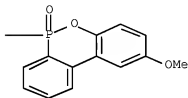
CAS Registry Number
1073500-93-6 CASNAME

Chemical or Trade Name
 6*o*-[bis(1,2,3,4,5,6-hexaphosphorin, 6,6'-[phenylphosphinylidene]bis[4,3-phenylene-2,1-ethenediyl]]bis[2-methoxy-, 6,6'-diacide (CA INDEX NAME)

PAGE 1-A

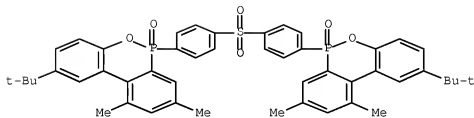


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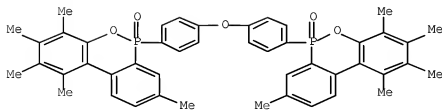
CAS Registry Number
 1073500-98-7 (CAS#)

Chemical or Trade Name
 6*o*-[bis(1,2,3,4,5,6-hexaphosphorin, 6,6'-[methylidene]bis[4,3-phenylene]bis[2-(1,1-dimethylethyl)-9,10-dimethyl-, 6,6'-diacide (CA INDEX NAME)



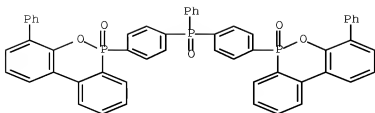
CAS Registry Number
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Chemical or Trade Name
 6*o*-[bis(1,2,3,4,5,6-hexaphosphorin, 6,6'-[oxylidene]bis[4,3-phenylene]bis[1,2,3,4,5-pentamethyl-, 6,6'-diacide (CA INDEX NAME)



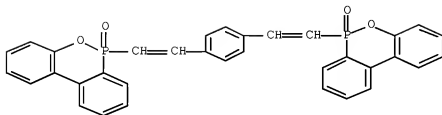
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Chemical or Trade Name
 6*o*-[bis(1,2,3,4,5,6-hexaphosphorin, 6,6'-[phenylphosphinylidene]bis[4,3-phenylene]bis[4-phenyl-, 6,6'-diacide (CA INDEX NAME)



CAS Registry Number
1073501-02-5 CAPUS

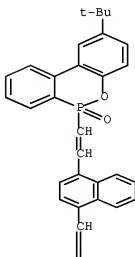
Chemical or Trade Name
6,6'-Bis[1,2-naphthophosphorin, 6,6'-(1,4-phenylenebis-2,1-ethenediylidene)-, 6,6'-di-oxide] (CA INDEX NAME)

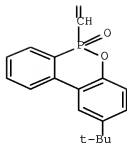


CAS Registry Number
1073501-02-6 CAPUS

Chemical or Trade Name
6,6'-Bis[1,2-naphthophosphorin, 6,6'-(1,4-naphthalenediylidene)-2,1-ethenediylidene]bis[2-(1,1-dimethylethyl)-, 6,6'-di-oxide] (CA INDEX NAME)

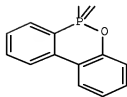
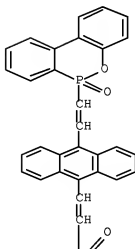
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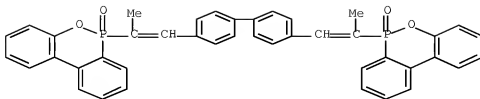
CAS Registry Number
1073501-03-7 CAPLUS

Chemical or Trade Name
6,6'-[9,10-anthracenediylidene-2,1-ethenediyl]bis(4-tert-butylphenyl) 6,6'-diisoxide (CA INDEX NAME)



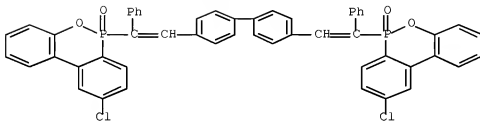
CAS Registry Number
1073501-04-8 CAPLUS

Chemical or Trade Name
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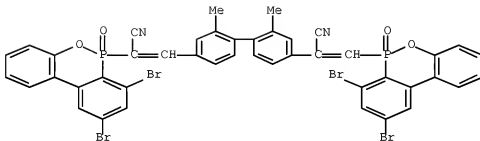
CAS Registry Number
1071501-05-9 CAP102

Chemical or Trade Name
6H-Dibenz[*c,e*] [1,2]oxaphosphorin, 6,6'-[1,1'-biphenyl]-4,4'-diylbis[1-phenyl-2,1-ethenediyl]]bis[9-chloro-, 6,6'-dioxide (CA INDEX NAME)



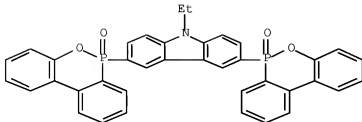
CAS Registry Number
1073501-06-0 CAPLUS

Chemical or Trade Name
6H-Dibenz[c,e][1,2]oxaphosphorin-6-acetonitrile,
7,9-dibromo-6-[4'-[2-cyano-2-(7,9-dibromo-6-oxido-6H-
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yl)methylene]-, 6-oxo- (CA INDEX NAME)



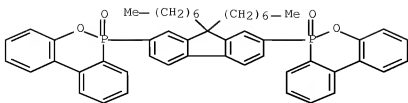
CAS Registry Number
1073501-08-2 CASPLUS

9H-Carbazole, 9-ethyl-3,6-bis(6-oxido-6H-dibenz[*c,e*] [1,2]oxaphosphorin-6-yl)- (CA INDEX NAME)



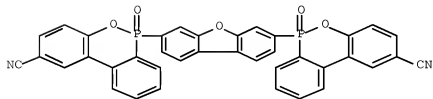
CAS Registry Number
1073501-09-3 CASUS

Chemical or Trade Name
6*H*-Dibenz[*a,e*]1,2-oxaphosphorin-6,6'-[3,9-diheptyl-3H-fluorene-2,7-diyl]bis-, 6,6'-dioxide (CA INDEX NAME)



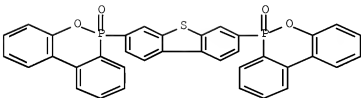
CAS Registry Number
1073501-10-5 CASUS

Chemical or Trade Name
6*H*-Dibenz[*a,e*]1,2-oxaphosphorin-2-carbonitrile, 6,6'-[3,7-dibenzofuran-2-ylidene]-, 6,6'-dioxide (CA INDEX NAME)



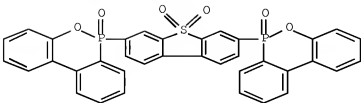
CAS Registry Number
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Chemical or Trade Name
6*H*-Dibenz[*a,e*]1,2-oxaphosphorin-, 6,6'-[2,7-dibenzothienophenediyl]bis-, 6,6'-dioxide (CA INDEX NAME)



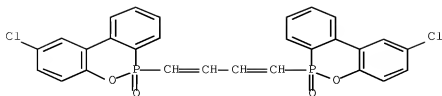
CAS Registry Number
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Chemical or Trade Name
6*H*-Dibenz[*a,e*]1,2-oxaphosphorin-, 6,6'-[5,5-dioxido-3,7-dibenzothiophenediyl]bis-, 5,5'-dioxide (CA INDEX NAME)



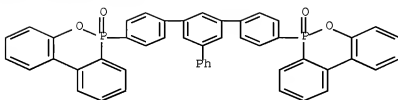
CAS Registry Number
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Chemical or Trade Name
6*H*-Dibenz[*a,e*]1,2-oxaphosphorin-, 6,6'-[1,3-butadiene-5,4-diyl]bis[2-chloro-, 6,6'-dioxide (CA INDEX NAME)



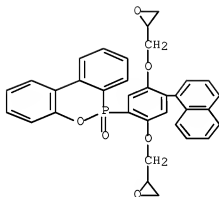
CAS Registry Number
1073501-14-0 CAS#09

Chemical or Trade Name
66-Bisbenz[e][1,2]oxaphosphorin, 6,6'-bis(5'-phenyl[1,3,3',1'-terphenyl]-4,4''-diyl)bis-, 6,6'-dioxide (CA INDEX NAME)



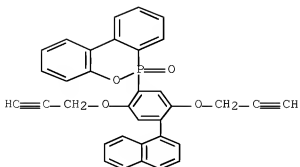
CAS Registry Number
1073501-15-1 CAS#09

Chemical or Trade Name
66-Bisbenz[e][1,2]oxaphosphorin, 6-(6-(1-naphthalenyl)-2,5-bis(2-oxiranyloxy)phenyl)-, 6-oxide (CA INDEX NAME)



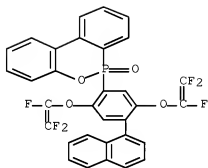
CAS Registry Number
1073501-16-2 CAS#09

Chemical or Trade Name
66-Bisbenz[e][1,2]oxaphosphorin, 6-(6-(1-naphthalenyl)-2,5-bis(2-propen-1-yloxy)phenyl)-, 6-oxide (CA INDEX NAME)



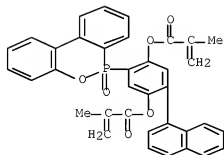
CAS Registry Number
1073501-17-3 CAS#105

Chemical or Trade Name
6H-Dibenz[e,h]phosphorin, 6-(4-((1-naphthalenyl)-2,5-bis((1,2,2-trifluoroethyl)oxy)phenyl)-6-oxido-6H-dibenz[e,h]phosphorin-6-ylidene)-2,5-bis((1,2,2-trifluoroethyl)oxy)benzene (CA 10000 NAME)



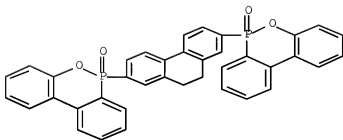
CAS Registry Number
1073501-18-6 CAS#105

Chemical or Trade Name
2-Fredensius acid, 2-methyl-, 1,3'-[2-((6-oxido-6H-dibenz[e,h]phosphorin-6-ylidene)-5-((1-naphthalenyl)-1,4-phenylene) ester (CA 10000 NAME)



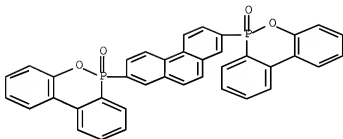
CAS Registry Number
1073501-19-5 CAS#105

Chemical or Trade Name
6H-Dibenz[e,h]phosphorin, 6,6'-(9,10-dihydro-2,7-phenanthrenediyl)bis-, 6,6'-di-oxide (CA 10000 NAME)



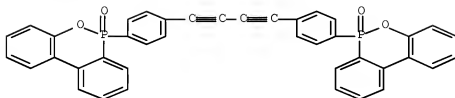
CAS Registry Number
1073501-20-5 CAPLUS

Chemical or Trade Name
6B-Dibenz[o,e][1,2]oxaphosphorin, 6,6'-[2,7-phenanthrenediyl]bis-,
6,6'-di-oxide (CA INDEX NAME)



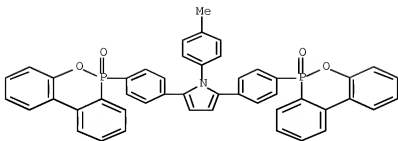
CAS Registry Number
1073501-21-9 CAPLUS

Chemical or Trade Name
6B-Dibenz[o,e][1,2]oxaphosphorin, 6,6'-[1,3-butadiyne-3,4-diylid-4,3-
phenylene]bis-, 6,6'-di-oxide (CA INDEX NAME)



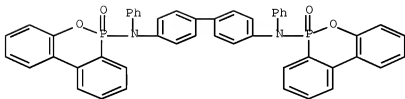
CAS Registry Number
1073501-22-5 CAPLUS

Chemical or Trade Name
1H-Pyrazole, 2-[4-methylphenyl]-2,5-bis[4-(6-oxido-6B-
dibenz[o,e][1,2]oxaphosphorin-6-yl)phenyl]- (CA INDEX NAME)



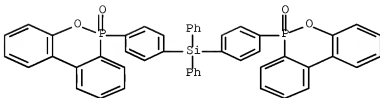
CAS Registry Number
1073501-23-3 CAS#203

Chemical or Trade Name
[1,1'-Biphenyl]-4,4'-diamine, 6,6'-bis[6-(6-oxido-6H-dibenzo[e,h]phosphorin-6-yl)-2-phenyl]- (CA INDEX NAME)



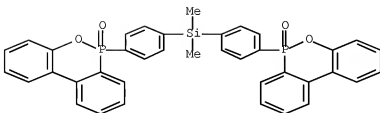
CAS Registry Number
1073501-24-2 CAS#203

Chemical or Trade Name
6H-Dibenzo[e,h]phosphorin, 6,6'-[di(phenylmethylene)di-4,1-phenylene]bis-, 6,6'-dioxide (CA INDEX NAME)



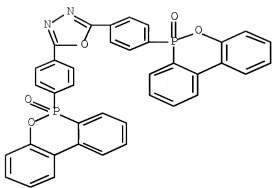
CAS Registry Number
1073501-25-5 CAS#203

Chemical or Trade Name
6H-Dibenzo[e,h]phosphorin, 6,6'-[di(phenylmethylene)di-4,1-phenylene]bis-, 6,6'-dioxide (CA INDEX NAME)



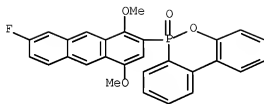
CAS Registry Number
1073501-26-6 CAS#203

Chemical or Trade Name
1,3,4-Oxadiazole, 2,5-bis[6-(6-oxido-6H-dibenzo[e,h]phosphorin-6-yl)phenyl]- (CA INDEX NAME)



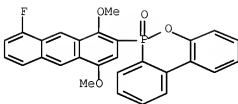
CAS Registry Number
1073501-27-5 CASINFO

Chemical or Trade Name
6H-Dibenz[*a,e*] [1,2]oxaphosphorin, 6-(7-fluoro-1,4-dimethoxy-2-anthracenyl)-, 6-oxide (CA INDEX NAME)



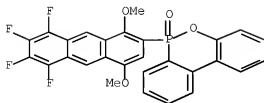
CAS Registry Number
1073501-28-8 CASINFO

Chemical or Trade Name
6H-Dibenz[*a,e*] [1,2]oxaphosphorin, 6-(8-fluoro-1,4-dimethoxy-2-anthracenyl)-, 6-oxide (CA INDEX NAME)



CAS Registry Number
1073501-29-7 CASINFO

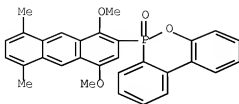
Chemical or Trade Name
6H-Dibenz[*a,e*] [1,2]oxaphosphorin, 6-(5,6,7,8-tetrafluoro-1,4-dimethoxy-2-anthracenyl)-, 6-oxide (CA INDEX NAME)



CAS Registry Number
1073501-30-8 CASINFO

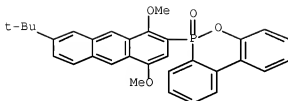
Chemical or Trade Name

68-Dibenz[*a,e*] [1,2]oxaphosphorin, 6-(1,4-dimethoxy-5,8-dimethyl-2-anthracenyl)-, 6-oxide (CA INDEX NAME)



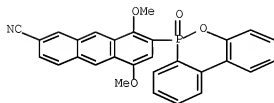
CAS Registry Number
1073501-31-3 CAPLUS

Chemical or Trade Name
68-Dibenz[*a,e*] [1,2]oxaphosphorin, 6-(1-(3,4-dimethylethyl)-3,4-dimethoxy-2-anthracenyl)-, 6-oxide (CA INDEX NAME)



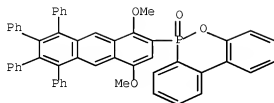
CAS Registry Number
1073501-32-2 CAPLUS

Chemical or Trade Name
2-Aurthracenecarbonitrile, 5,8-dimethoxy-7-(6-oxide-6H-dibenz[*a,e*] [1,2]oxaphosphorin-6-yl)- (CA INDEX NAME)



CAS Registry Number
1073501-33-5 CAPLUS

Chemical or Trade Name
68-Dibenz[*a,e*] [1,2]oxaphosphorin, 6-(1,6-dimethoxy-5,6,7,8-tetraphenyl-2-anthracenyl)-, 6-oxide (CA INDEX NAME)



LB ANSWER 15 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number

2008 681976 CAPLUS [Public](#)

Document Number

192 29186

Title

Aggregation-induced emission enhancement of phosphorazanthrene containing P-phenylene dibenzoate and application to detection of transition metals

Author Inventor

Qian Li-Jun; Tong Bin; Zhi Jun-Ge; Yang Fan; Shen Jin-Bo; Shi Jun-Bing; Dong Yu-Peng

Patent Assignee/Corporate Source

College of Materials Science & Engineering, Beijing Institute of Technology, Beijing, 100081, Peop. Rep. China

Source

Huaxue Xuebao (2008), 66(9), 1134-1138 CODEN HHHHP4; ISSN 0567-7351

Document Type

Journal
Language
Chinese

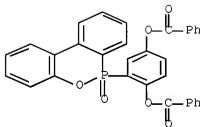
Abstract

Fluorescence of the organic light-emitting compounds is often quenched when the luminophors are fabricated into solid thin films, which has greatly limited their practical applications. It is important to design and synthesize the novel organic luminophors with excellent light emission property in the solid state. When 6-oxa-3-cyo-5-[2,5-dibenzos(oxaphenyl)]-5-phosphaphenanthrene (OP) aggregates to a certain degree, the fluorescence strength of OP increases proportionally which shows obvious aggregation-induced emission enhancement (AIEE) property. AIEE property disappeared if OP concentration was lower than 1×10^{-4} mol/L. Hg^{2+} , Pd^{2+} and Pt^{2+} ions (1×10^{-4} mol/L) can efficiently quench the emission intensity of OP (2×10^{-5} mol/L) during the aggregation state formation, with the quenching efficiency to OP fluorescence being 28%, 34%, 74%, resp and higher than those by Pb^{2+} , Zn^{2+} , Co^{2+} , Cu^{2+} , Ni^{2+} , and Ag^{+} ions. This novel phenomenon enables the applications to chemosensor for detecting of transition metal ions.

HR Structure

CAS Registry Number
1048639-10-6 (CAS/US)

Chemical or Trade Name
1,4-Benzenediol, 2-[(6-oxido-6H-dibenz[c,e][1,2]oxaphosphorin-6-yl)]-,
1,4-dibenzonate (CA INDEX NAME)



GB CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)

LE ANSWER 18 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number
2008 471740 CAPLUS [Fulltext](#)

Document Number
148 437137

Title
Manufacturing method of organic electroluminescent device and organic electroluminescent device

Author/Inventor

1stn, Takashi, Ito, Hiroki

Patent Assignee/Corporate Source
Seiko Epson Corp., Japan

Source
Jpn. Kokai Tokkyo Koho, 10pp CODEN JHOXAF

Document Type
Patent

Language
Japanese

Patent Information

PATENT NO	KIND	DATE	APPLICATION NO.	DATE
JP 2008091570	A	20080417	JP 2006-289923	20060929

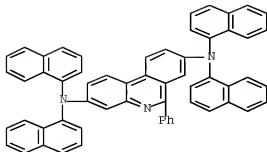
Abstract

The invention relates to a manufacturing method of an organic electroluminescent device comprising a hole injection layer containing a conductive polymer having an acidic dopant, and an organic luminescent layer between a pair of electrodes, wherein a hole transport layer and a heat resistant layer having glass transition temperature > 180, or no glass transition are placed between the hole injection layer and the luminescent layer.

HR Structure

CAS Registry Number
1018330-10-3 (CAS/US)

Chemical or Trade Name
3,8-Bis(benzanthracen-9-ylideneamino), 9,9,10,10-tetra-1-naphthalenyl-6-phenyl-,
(CA INDEX NAME)



LIB ANSWER 17 OF 49 CAPLUS: COPYRIGHT 2010 ACS on STN

Accession Number

2008 154837 CAPLUS [Full-text](#)

Document Number

148.403653

Title

Synthesis and characterization of polyketals with 3,8-diamino-6-phenylphenanthridine moieties exhibiting light emitting properties: Molecular and supramolecular engineering concept

Author(s)

Isan, Agnieszka; Mazurek, Zbigniew; Kaszaniuk, Beata; Jazdzewski, Beata; Sek, Dorota

Patent Assignee/Corporate Source

Centre of Polymer and Carbon Materials, Polish Academy of Sciences, Zabrze, 41-819, Pol.

Source

Spectrochimica Acta, Part A: Molecular and Biomolecular Spectroscopy (2008), 65A(2), 291-303 CODEN: SAMCAS, ISSN: 1386-1425

Document Type

Journal

Language

English

Abstract

Relationship between structures and properties of new conjugated polyketals (PKs) with special architectures, synthesized from three diketones, i.e. p-dibenzoylbenzene (dibenzoyl), trans-1,2-dibenzoylethylene and 3,8-diamino-6-phenylphenanthridine, was investigated. The photoluminescence (PL) of green, yellow and red emitting light polymers and their blend was studied. These included the effects of excitation wavelength, concentration and film thickness on the PL. Photoluminescence properties of the PKs before and after protonation with 10-Camphorsulfonic acid (CSA) were tested. The structure formation of (PKs)(CSA)₂ complexes are discussed on the basis of FTIR spectroscopy.

Hit Structure

CAS Registry Number
1015542-60-5 CASREX3

Chemical or Trade Name

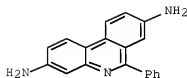
Methanone, 2,2'-(1,4-phenylene)bis[2-phenyl-, polymer with
6-phenyl-3,8-phenanthridinediamine (CA INDEX NAME)

CN

1

CN 53009-64-0

CNF C3P M12 N3

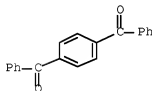


CN

2

CN 3016-37-5

CNF C2D M16 O2



CAS Registry Number
1015542-60-5 CASREX3

Chemical or Trade Name

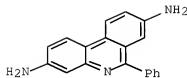
2-Butene-1,4-dione, 1,4-diphenyl-, (Z)-, polymer with
6-phenyl-3,8-phenanthridinediamine (CA INDEX NAME)

CN

1

CN 53009-64-0

CNF C3P M12 N3

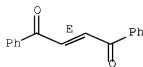


CN

2

CN 958-28-4

CNF C14 M12 O2

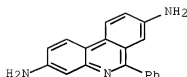


CAS Registry Number
115542-47-3 CAPLUS

Chemical or Trade Name
1,2-bis(phenyl)-1,2-diphenyl-, polymer with
6-phenyl-3,9-phenanthridine (CA INDEX NAME)

CN
1

CPI 5209-14-0
CMF C19 H15 N3



CN
2

CPI 134-81-6
CMF C14 H10 O2



LB ANSWER 18 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number
2007-80709 CAPLUS File(s)
Document Number
14728742

Title

Metal complexes of cyclometallated indazole[1,2-b]phenanthridine and dimidazole[1,2-a:1',2'-b]quinoxaline ligands and isoelectronic and benzannulated analogs thereof

Author(s)

Knowles, David B.; Lin, Chun; Mackenzie, Peter; Borden, Tsai, Jui-Yi; Walters, Robert W.; Beers, Scott A.; Brown, Cory S.; Yeager, Walter H.
Patent Assignee/Corporate Source
Universal Display Corp., USA

Source

U.S. Pat. Appl. Publ., 101 pp CODEN USXXCO

Document Type

Patent

Language

English

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2007/190399	A1	2007/08/16	US 2007-704093	2007/02/09
WO 2007/095118	A2	2007/08/23	WO 2007-US9369	2007/02/09
WO 2007/095118	A3	2007/12/06		
EP 1981698	A2	2008/01/02	EP 2007-750408	2007/02/09
JP 2009506071	T	2009/07/16	JP 2006-504393	2007/02/09
US 2008/029703	A1	2008/01/24	US 2006-44605	2006/03/07
IN 2006DN06353	A	2008/01/24	IN 2006-DN6353	2006/07/21
KR 2008/08489	A	2008/01/10	KR 2006-719429	2006/08/07
CN 101419718	A	2009/04/22	CN 2007-6008593	2008/08/10

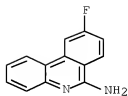
Abstract

Phosphorescent metal complexes comprising cyclometallated indazole[1,2-b]phenanthridine and dimidazole[1,2-a:1',2'-b]quinoxaline ligands, or isoelectronic or benzannulated analogs thereof, are described. Organic light-emitting diode devices comprising these compts. are also described.

HR Structure

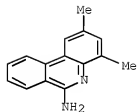
CAS Registry Number
857953-32-9 CAPLUS

Chemical or Trade Name
6-Phenanthridine, 9-Ethoxy- (CA INDEX NAME)



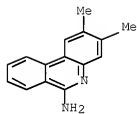
CAS Registry Number
815530-85-2 CAP108

Chemical or Trade Name
6-Fluoroacrididine, 2,4-dimethyl- (CA INDEX NAME)



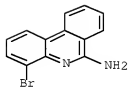
CAS Registry Number
945141-93-1 CAP108

Chemical or Trade Name
6-Methoxyacrididine, 2,4-dimethyl- (CA INDEX NAME)



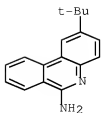
CAS Registry Number
945141-92-4 CAP108

Chemical or Trade Name
6-Methoxyacrididine, 4-bromo- (CA INDEX NAME)



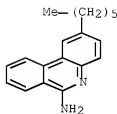
CAS Registry Number
945141-92-4 CAP108

Chemical or Trade Name
6-Methoxyacrididine, 2-(1,1-dimethylethyl)- (CA INDEX NAME)



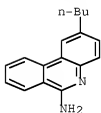
CAS Registry Number
946147-26-6 CAPL05

Chemical or Trade Name
6-Phenanthridinamine, 2-tert-butyl- (CA INDEX NAME)



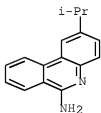
CAS Registry Number
946147-25-0 CAPL05

Chemical or Trade Name
6-Phenanthridinamine, 2-butyl- (CA INDEX NAME)



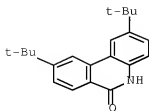
CAS Registry Number
946147-30-6 CAPL09

Chemical or Trade Name
6-Phenanthridinamine, 2-(1-methylethyl)- (CA INDEX NAME)



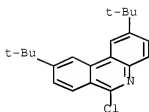
CAS Registry Number
946147-35-9 CAPL09

Chemical or Trade Name
6-[50]-Phenanthridinone, 2,9-bis(1,1-dimethylethyl)- (CA INDEX NAME)



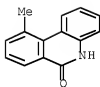
CAS Registry Number
946147-16-9 CASL05

Chemical or Trade Name
Phenanthridine, 6-chloro-2,9-bis(1,1-dimethylethyl)- (CA INDEX NAME)



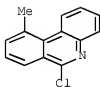
CAS Registry Number
946147-40-6 CASL05

Chemical or Trade Name
6(5H)-Phenanthridinone, 10-methyl- (CA INDEX NAME)



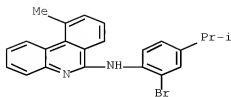
CAS Registry Number
946147-41-7 CASL05

Chemical or Trade Name
Phenanthridine, 6-chloro-10-methyl- (CA INDEX NAME)



CAS Registry Number
946147-42-9 CASL05

Chemical or Trade Name
6-Phenanthridinamine, N-[2-bromo-4-(1-methylethyl)phenyl]-10-methyl- (CA INDEX NAME)



09 CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (18 CITINGS)

LI ANSWER 19 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number

2007 727975 CAPLUS Pub363

Document Number

147128496

Title

Organic electroluminescent devices, displays and Ir complex-derived macromolecular materials

Author/Inventor

Osada, Akihito, Takahashi, Yoshitaki

Patent Assignee/Corporate Source

Shinwa Denko K. K., Japan

Source

Jpn. Kokai Tokkyo Koho, 55pp. CODEN JHOXAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007169474	A	2007/07/05	JP 2005-369456	2005/12/22

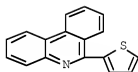
Abstract

The materials, providing devices showing high-purity red emission and long service life, have repeating unit derived from a complex I [Pr1-R2 = H, halo, nitro, cyano, etc.; Q1 = C, N, S; Z1 = atomic group forming 5- or 6-membered aromatic (heterocyclic) ring; L = polymerizable group-containing bis(alkene ligand of monovalent anion). Also claimed are surface-emitting light sources and displays employing the materials in organic polymer layers.

Hit Structure

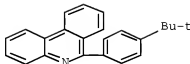
CAS Registry Number
452010-33-5 CAPLUS

Chemical or Trade Name
Phenanthroline, 6-[4-(2-(2-phenyl)-



CAS Registry Number
942867-34-5 CAPLUS

Chemical or Trade Name
Phenanthroline, 6-[4-(2,2-dimethylthienyl)]phenyl]-



09 CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

LI ANSWER 20 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number

2007 464129 CAPLUS Pub363

Document Number

146 471844

Title

Organic element for low voltage electroluminescent devices

Author/Inventor

Begley, William J., Hattori, Takanori K., Luo, Liang Sheng, Spindler, Jeffrey P., Kibbey, Kevin P.

Patent Assignee/Corporate Source

Eastman Kodak Co., USA

Source

U.S. Pat. Appl. Publ., 70 pp., Cont.-in-part of U.S. Ser. No. 299,296, abandoned CODEN USOXCO

Document Type

Patent

Language

English

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2007/0092739	A1	2007/0426	US 2006-501336	2006/0809
WO 2007/030334	A1	2007/0303	WO 2006-405403/03	2006/1012
EP 1941562	A1	2008/0709	EP 2006-825999	2006/1012
JP 2009514222	T	2009/0402	JP 2008-537758	2006/1012
US 2007/0207347	A1	2007/0906	US 2007-796953	2007/0430
CN 101292371	A	2008/1022	CN 2006-90039363	2008/0422
KR 2008063780	A	2008/0707	KR 2008-7/09767	2008/0424
US 20100019671	A1	2010/0128	US 2009-373173	2009/1005

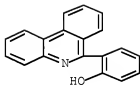
Abstract

An OLED device comprises a cathode, a light emitting layer and an anode, in that order, and, has located between the cathode and the light emitting layer, a further layer containing a cyclometalated complex represented by I, wherein: Z and the dashed line represent a 5- or 6-membered ring with M; each A represents H or a substituent and each B represents an independently selected substituent on the Z atoms, provided that: (2) substituents may combine to form a fused ring or a fused ring system, j is 0-3 and k is 1 or 2, M represents a Group III, IVA, IIA and IIB element of the periodic table, m and n are independently selected integers selected to provide a neutral charge on the complex, and provided that the complex does not contain the 8-hydroxyquinolate ligand. Such devices exhibit reduce drive voltage while maintaining good luminescence.

HR Structure

CAS Registry Number
914304-85-1 CAPLUS

Chemical or Trade Name
Phenol, 2-(6-phenanthridinyl)-, lithium salt (1:1) (CA INDEX NAME)



CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

LB ANSWER 31 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number

2007-461712 CAPLUS Fulltext

Document Number

146.471838

Title

Organic element for low voltage electroluminescent devices

Author/Inventor

Begay, William J.; Rajeevaran, Manju; Hattar, Tukaram K.; Andrievsky, Natasha

Patent Assignee/Corporate Source

Eastman Kodak Company, USA

Source

U.S. Pat. Appl. Publ., 48pp CODEN: USXXCO

Document Type

Patent

Language

English

Patent Information

PATENT NO	KIND	DATE	APPLICATION NO	DATE
US 20070092758	A1	20070426	US 2005-259366	20051026
WO 2007050301	A2	20070503	WO 2006-US39891	20061012
WO 2007050301	A3	20060912		
EP 1941563	A2	20060709	EP 2006-016782	20061012
JP 2009514215	T	20090402	JP 2008-537745	20061012

Abstract

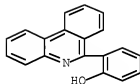
An OLED device comprises a cathode, a light emitting layer, and an anode, in that order, and having located between the cathode and the light emitting layer, a further layer containing: (a) 10 volume% or more of a carbocyclic fused ring aromatic compound, and (b) a cyclometallated complex represented by I wherein Z and the dashed arc represent 2 or 3 atoms and the bonds necessary to complete a 5- or 6-membered ring with M, each a represents n or a substituent and each B represents an independently selected substituent on the Z atoms, provided that: (i) substituents may combine to form a fused ring or a fused ring system; (ii) a 5-3 and a 1 or 2, M represents a Group IA, IIA, IIIA and IIB element of the Periodic Table; and m and n are independently selected integers selected to provide a neutral charge on the complex, and provided that the complex does not contain the hydroquinone-like ligand. Such devices exhibit reduced drive voltage while maintaining good luminance.

HR Structure

CAS Registry Number
916986-85-1 CAPLUS

Chemical or Trade Name

Phenol, 2-(6-phenanthridinyl)-, lithium salt [1:1] (CA INDEX NAME)



LB ANSWER 22 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number

2007-461683 CAPLUS Fulltext

Document Number

146.471837

Title

Organic element for low voltage electroluminescent devices

Author/Inventor

Begay, William J.; Hattar, Tukaram K.; Andrievsky, Natasha; Skusnik, Wojciech K.

Patent Assignee/Corporate Source

Eastman Kodak Company, USA

Source

U.S. Pat. Appl. Publ., 48pp CODEN: USXXCO

Document Type

Patent

Language

English

Patent Information

PATENT NO	KIND	DATE	APPLICATION NO	DATE
US 20070092758	A1	20070426	US 2005-259740	20051026
WO 2007050303	A1	20070503	WO 2006-US39854	20061012
EP 1940998	A1	20060709	EP 2006-016783	20061012
JP 2009514217	T	20090402	JP 2008-537747	20061012

Abstract

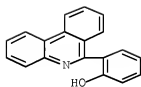
An OLED device comprises a cathode, a light emitting layer, and an anode, in that order, and comprising: (a) a further layer located between the cathode and the light emitting layer, containing: (i) 10 volume% or more of a carbocyclic fused ring aromatic compound, and (ii) at least 1 salt or complex of a Group IA, IIA, IIIA and IIB element of the periodic table, and (b) an odd layer, located between the anode and the light emitting layer, containing a compound of formula I, wherein each R independently represents H or an independently selected substituent, at least 1 R representing an electron-withdrawing substituent having a Hammett's sigma para value of at least 0.3. Such devices exhibit reduced drive voltage while maintaining good luminance.

HR Structure

CAS Registry Number
916986-85-1 CAPLUS

Chemical or Trade Name

Phenol, 2-(6-phenanthridinyl)-, lithium salt [1:1] (CA INDEX NAME)



LB ANSWER 23 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN
Accession Number
2007-461610 CAPLUS [F56194](#)
Document Number
146 471635

Title
Organic element for low voltage electroluminescent devices
Author/Inventor
Begley, William J.; Hattori, Takanori K.; Andrievsky, Natascha
Patent Assignee/Corporate Source
Eastman Kodak Company, USA

Source
U.S. Pat Appl Publ, 51pp CODEVI USXKCO

Document Type
Patent

Language
English

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070092734	A1	20070426	US 2006-0256719	20061026
WO 2007050302	A1	20070503	WO 2006-US39653	20061012
EP 1940997	A1	20060709	EP 2006-022511	20061012
JP 2009514216	T	20090402	JP 2006-037746	20061012

Abstract

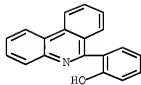
An OLED device comprises a cathode, a light emitting layer and an anode, in that order, and comprising: (i) in the light-emitting layer at least 1 light emitting compound selected from amine containing monosilyl, amine containing diaryl, amine containing triaryl and amine containing tetraaryl compounds, and (ii) a further layer located between the cathode and the light-emitting layer, containing (a) 10-volume % or more of a carbocyclic fused ring aromatic compound, and (b) at least 1 salt or complex of a Group IA, IIA, IIIA or IIB element of the periodic table. Such devices exhibit reduce drive voltage while maintaining good luminance.

HR Structure

CAS Registry Number
31596-93-1

Chemical or Trade Name
Phenol, 2-(6-phenanthridinyl)-, lithium salt (1:1)

(CA INDEX NAME)



LB ANSWER 24 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN
Accession Number
2007-461610 CAPLUS [F56194](#)
Document Number
146 471635

Title
Organic element for low voltage electroluminescent devices
Author/Inventor
Begley, William J.; Hattori, Takanori K.; Andrievsky, Natascha
Patent Assignee/Corporate Source
Eastman Kodak Company, USA

Source
U.S. Pat Appl Publ, 49pp CODEVI USXKCO

Document Type
Patent

Language
English

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070092733	A1	20070426	US 2006-0256671	20061026
WO 2007050331	A1	20070503	WO 2006-US40236	20061012
EP 1941564	A1	20060709	EP 2006-022972	20061012

JP 2009514221	T	20090402	JP 2008-537797	20061012
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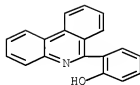
Abstract

An OLED device comprises a cathode, a light emitting layer and an anode, in that order, wherein (i) the light-emitting layer comprises up to 10 volume% of a light emitting compound and at least 1 anthracene host compound of formula 1 wherein R¹ and R² independently represents H or an independently selected substituent, and (ii) a further layer located between the cathode and the light emitting layer, contains (a) 10-volume % or more of an anthracene compound of formula 1 and (b) at least 1 salt or complex of an element selected from Group IA, IIA, IIIA and IIB of the periodic table. Such devices exhibit reduced drive voltage while maintaining good luminance.

Hit Structure

CAS Registry Number
916396-85-1 CASI/TS

Chemical or Trade Name
Phenol, 2-(6-phenanthridinyl)-, lithium salt (1:1) (CA INDEX NAME)



66 CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITING)

LB ANSWER 26 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number
2006 1340343 CAPLUS Fulltext

Document Number
147277990

Title
Synthesis and electroluminescent properties of conjugated copolymer containing phenothiazine and phenanthrene unit

Author/Inventor
Han, Yoon Soo, Kim, Sang Dae, Kwon, Younghean, Choi, Kyu-Han, Park, Lee Soon

Patent Assignee/Corporate Source
Daegu Gyeongbuk Institute of Science and Technology, Taseu, S. Korea

Source
Molecular Crystals and Liquid Crystals (2006), 459, 119-128 CODEN MCLCDB, ISSN 1540-1466

Document Type
Journal

Language
English

Abstract
The conjugated copolymer, poly[9,10-bis(4-ethylphenyl)phenothiazine-4,8-bis(4-phenylphenyl)] [poly(PZ-PT)], with azomethine linkages, was synthesized by a Schotten-Baumann reaction. This new conjugated copolymer exhibited improved solubility in common organic solvents due to the presence of alkyl side chains on phenothiazine rings as well as polar azomethine groups in the main chains. Single-layered PLED made with poly(PZ-PT) as an emitting layer exhibited EL emission at 572 nm (yellow, color coordinates of $x = 0.51$, $y = 0.48$). Double-layered PLED fabricated with the synthesized polymer as an emitting layer and Alq3 as an electron transporting layer exhibited enhanced EL emission and efficiency compared to that of single-layered PLED. With increasing thickness of the Alq3 layer in double-layered PLED the emission peak gradually shifted to the single-layered PLED made with only Alq3 as an emitting layer, confirming good hole transporting behavior of the synthesized conjugated copolymer.

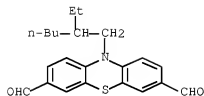
HR Structure

CAS Registry Number
946452-26-8 CAPLUS

Chemical or Trade Name
10-(2-ethyl-1,1'-bis(4-phenylphenyl)-5,7-bis(carboxaldehyde)-10,12-ethyldiarylethylene polymer with 6-phenyl-2,9-bis(azomethine)phenanthrene (CA INDEX NAME)

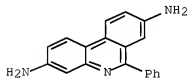
Chemical
1

Chemical
403610-12-8
Chemical
C22 H25 N O2 S



Chemical
2

Chemical
C22 H25 N O2 S



GO CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

LB ANSWER 26 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number
2006 1339043 CAPLUS Fulltext

Document Number
14671617

Title
Organic element for low voltage electroluminescent devices employing a mixed layer of a polycyclic aromatic compound and a metal compound

Author/Inventor
Regier, William J., Hatakey, Takam K., Rajeswarar, Manj, Andrievsky, Natasha

Patent Assignee/Corporate Source
Eastman Kodak Company, USA

Source
U.S. Pat. Appl. Publ., 48pp., Cont.-inpart of U.S. Ser. No. 156,302. CODEN: USXXCO

Document Type
Patent

Language
English

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060286405	A1	20061221	US 2005-059472	20051026
US 20060286402	A1	20061221	US 2005-156302	20050617
WO 2006138075	A2	20061228	WO 2006-021338	20060602
WO 2006138075	A3	20070816		
EP 1891692	A2	20080227	EP 2006-771896	20060602
EP 1891692	B1	20081015		

JP 2008547196	T	20081225	JP 2008-516910	20060602
KR 2008023971	A	20080330	KR 2007-729281	20071214
CN 101199063	A	20080611	CN 2006-80621616	20071217

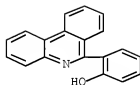
Abstract

Organic light emitting diode (OLED) devices with reduced drive voltage are described which comprise a cathode, a light emitting layer and an anode, in that order, and, has located between the cathode and the light emitting layer, a layer containing (a) more than 10 volume % of a carbocyclic fused ring aromatic compound and (b) at least one salt or complex of an alkali or alkaline earth metal.

Hit Structure

CAS Registry Number
516396-85-1 CAS103

Chemical or Trade Name
Phenoxi, 2-(6-phenanthridinyl)-, lithium salt (1:1) (CA INDEX NAME)



06 CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)

LB ANSWER 27 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number
2008102802 CAPLUS Fulltext

Document Number
149392006

Title
Microorganism cell detection method using fluorescent indicator
Author/Inventor
Horiki, Shigetsuh

Patent Assignee/Corporate Source
Mitsubishi Electric Industrial Co., Ltd., Japan
Source
Jpn Kokai Tokkyo Koho, 10pp OODEN JOKKAI

Document Type
Patent

Language
Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006262775	A	20061005	JP 2005-65504	20050324

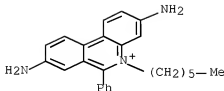
Abstract

A microorganism cell detection method is provided, which comprises using a fluorescent indicator to a test sample containing or potentially containing microorganism cells, and detecting microorganism cells with a low cost and an improved accuracy in comparison with the conventionally known methods. The method is characterized in that the intensity of fluorescence generated by microorganism cells is increased by bringing a fluorescent indicator (e.g., fluorescent nucleic acid staining agent) and a luminescence sensitizer (e.g., divalent metal ions) into contact with a microorganism cell sample, and thereby, the measurement sensitivity is improved. Also provided is a microorganism counting apparatus using a small-sized and inexpensive light source, which is used for the method.

Hit Structure

CAS Registry Number
21156-66-8 CAS103

Chemical or Trade Name
Phenanthroindanone, 3,3'-diamino-5-hexyl-6-phenyl-, iodide (1:1) (CA INDEX NAME)



LB ANSWER 28 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number
2008653771 CAPLUS Fulltext

Document Number
149124988

Title
Polymer compound and its use in heat-resistant polymer light-emitting device

Author/Inventor
 Kobayashi, Shigeyu, Kobayashi, Susumu
 Patent Assignee/Corporate Source
 Sumitomo Chemical Company, Limited, Japan
 Source
 PCT Int. Appl., 154 pp. CODEN: PIKXDE
 Document Type
 Patent
 Language
 Japanese
 Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006/070848	A1	2006/07/05	WO 2005-JP04011	2005/12/21
JP 2006182500	A	2006/07/13	JP 2004-378917	2004/12/28
GB 2437213	A	2007/01/17	GB 2007/14955	2005/12/21
DE 112005003270	T5	2006/04/10	DE 2005-112005003270	2005/12/21
US 2006/0145571	A1	2006/06/19	US 2007-722225	2007/06/20
KR 2007/090041	A	2007/09/04	KR 2007-717119	2007/07/25
CN 101124259	A	2008/02/13	CN 2005-90048421	2007/08/17

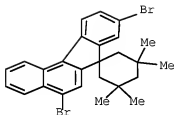
Abstract
 Disclosed is a polymer compound characterized by containing a structure represented by the following formula I (ring A and ring B independently represent an optionally substituted aromatic hydrocarbon ring, and ring C represents an alicyclic hydrocarbon which contains no fused aromatic compound while having at least one substituent; the alicyclic hydrocarbon may contain a heteroatom).
Hit Structure

CAS Registry Number
 894732-17-7 CAS/US

Chemical or Trade Name
 6,6'-Dibromo-4,4'-bipyrene, 3,3'-dibromo-6,6'-diethyl-, polymer with
 5,8-dibromo-3',3'',4'',4'''-tetraethoxy[apico]fluorene-7,11'-
 cyclobutane) (9C1) (CA INDEX NAME)

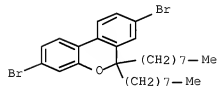
CN 1

CN 894732-17-3
 CNF C26 H26 Br2



CN 2

CN 688013-66-3
 CNF C29 H40 Br2 O



68 CITING REF COUNTRIES 2 THERE ARE 2 CAS/US RECORDS THAT CITE THIS RECORD (6 CITING)

LB ANSWER 29 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number

2006364700 CAPLUS F₁₆-bzw

Document Number

14353090

Title

Aminoanthryl-substituted compounds and organic electroluminescent devices therewith having high color purity and efficiency

Author/Inventor

Saito, Akiko, Okimaki, Keiji, Yamada, Naoki, Yajima, Masataka, Senoo, Akihito, Ueno, Kazunori

Patent Assignee/Corporate Source

Canon Inc., Japan

Source

Jpn Kokai Tokkyo Koho, 38 pp CODEN: JPOKAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006151844	A	20060615	JP 2004-342464	20041126

Abstract

The compds. are represented by (I) (Z1 = single bond, alkynylene, aralkylene, etc.; Ar1 = faciphenanthrene, acenaphthylene, etc.; Ar2, Ar3 = alkyl, aralkyl, aryl, etc.; X1 = single bond, arylene, etc.; R1, R2 = H, D, halo, alkyl, etc.; a = 1-8, b = 1-3, c = 1-4). Organic layers of the devices also mentioned contain the compds. The devices show long service life.

Hfr Structure

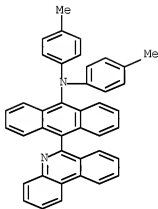
CAS Registry Number

870442-02-3 CAPLUS

Chemical or Trade Name

9-Aminoacene, 9,9'-bis(4-methylphenyl)-10-(6-phenanthridinyl)- ICA

INDEX NAME



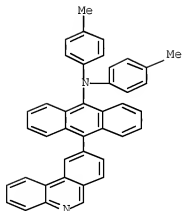
CAS Registry Number

870442-02-3 CAPLUS

Chemical or Trade Name

9-Aminoacene, 9,9'-bis(4-methylphenyl)-10-(6-phenanthridinyl)- ICA

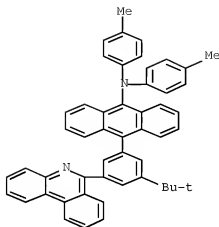
INDEX NAME



CAS Registry Number

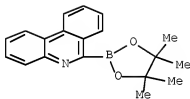
890442-06-0 CAPLUS

Chemical or Trade Name
9-Azobenzene, 10-[3-(1,1-dimethylethyl)-5-(6-phenanthridinyl)phenyl]-
N,N-bis(4-methylphenyl)- (CA INDEX NAME)



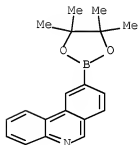
CAS Registry Number
890442-10-0 CAPLUS

Chemical or Trade Name
Phenanthridine, 6-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)- (CA
INDEX NAME)



CAS Registry Number
890442-20-3 CAPLUS

Chemical or Trade Name
Phenanthridine, 9-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)- (CA
INDEX NAME)



OR CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD
(4 CITINGS)

18 ANSWER 30 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number

206821235 CAPLUS [Fulltext](#)

Document Number
144301737

Title
Polymer luminescent material composition and polymer light emitting devices

Author/Inventor

Inventor Yasunori, Shirozawa, Nobuhiko, Nakamichi, Hirotoshi
 Patent Assignee/Corporate Source Sumitomo Chemical Company, Limited, Japan

Source PCT Int. Appl., B2 pp. CODEN: POKX22

Document Type Patent

Language Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006/029290	A1	2006/03/09	WO 2005-JP15606	2005/08/23
GB 2432838	A	2007/06/06	GB 2007-0585	2005/08/23
GB 2432838	B	2009/02/18		
DE 112005002083	T5	2007/07/19	DE 2005-112005002083	2005/08/23
CN 101048465	A	2007/10/03	CN 2005-90036782	2005/08/23
JP 2006097608	A	2006/04/13	JP 2005-256978	2005/08/31
JP 2006169502	A	2006/08/29	JP 2005-256979	2005/08/31
KR 2007061840	A	2007/06/14	KR 2007-707064	2007/03/26
US 20090039769	A1	2009/02/12	US 2007-074029	2007/08/21

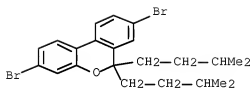
Abstract

A polymer/luminescent material composition is characterized by comprising a polymer/luminescent material and a compound selected from among compounds of the following general formula (I) to (IV) wherein X is an atom or atomic group forming a 5- or 6-membered ring together with the four carbon atoms constituting the 2 benzene rings, and Q and T are each independently H, halo, alkyl, alkoxy, allyl, aryl, silyl, arylsilyl, arylalkoxy, arylalkyl, arylalkenyl, arylalkynyl, substituted alkoxy, substituted allyl, substituted alkenyl, substituted amino, amide, an acid imide group, acyloxy, a monosubstituted heterocyclic group, heterocycloxy, heteroalkoxy, cyano, or nitrile.

Hit Structure

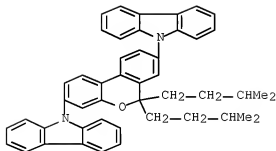
CAS Registry Number 699023-67-4 CAPLUS

Chemical or Trade Name 6,8-Dibromo-6,8-bis(3-methylbutyl)- (CA INDEX NAME)



CAS Registry Number 878551-66-5 CAPLUS

Chemical or Trade Name 9,9'-Dibenzosilo, 9,9'-(6,6-bis(3-methylbutyl))-6,6'-dibenzosilo, 9,9'-bis(3-methylbutyl)-6,6'-dibenzosilo (CA INDEX NAME)



GS CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

LIB ANSWER 31 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number

2008 13288 CAPLUS 6/2/08

Document Number

144339664

Title

Theoretical study of k(R) complexes of fluorinated phenylbenzoxazine as red phosphorescent material

Author/Inventor

Lee, Young Hee; Park, Na Gil; Ha, Yunkyoung; Kim, Young Suk

Patent Assignee/Corporate Source

Department of Molecular Electronics Engineering, Hangeul University, Seoul, 121-791, S. Korea

Source

Japanese Journal of Applied Physics, Part 1: Regular Papers, Brief Communications & Review Papers (2006), 45(1B), 563-567 CODEN: JAPND6

Document Type

Journal

Chemical or Trade Name
Phenanthridine, 6-[4-fluorophenyl]- (CA INDEX NAME)



Document Number

142 374970

PCT Int. Appl. 111 pp. CODEN: PIXXD2

Patent

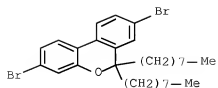
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005023174	A1	20050414	WO 2004/014569	200408028
DE 112004001858	T5	20060727	DE 1004112094001856	200408029
GB 2424995	A	20061011	GB 2006-0519	200408028
DE 2424995	B	20060709		
CN 1806388	CN	20061115	CN 2004-680021951	200408028
JP 2005126705	A	20050519	JP 2004-286813	2004093030
US 20070051982	A1	20070308	US 2006-57339	200603239
KR 2006115861	A	20061010	KR 2006-708210	20060428

Abstract

[illegible]

100

Chemical or Trade Name
6H-Dibenz[a,h]dipyran, 3,8-dibromo-6,6-dimethyl- (CA INDEX NAME)

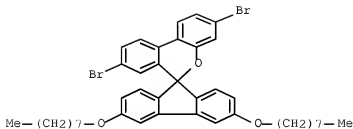


CAS Registry Number
849691-56-7 CAS168

Chemical or Trade Name
Spiro[4(8-dibenz[*b,d*]pyren-6,9'-[5H]fluorene)],
3,5-dibromo-3',5'-bis(octyloxy)-, polymer with
3,5-dibromo-5,6-diethyl-8(8-dibenz[*b,d*]pyren-1-yl)-9H-fluorene (9CI) (CA INDEX NAME)

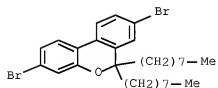
CM
1

CFR 68013-72-1
CMF C41 B46 Br2 O3



CM
2

CFR 68013-66-3
CMF C29 B40 Br2 O



LB ANSWER 33 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number
200330248 CAPLUS [Full-text](#)
Document Number
142363456

Title
Organic electroluminescent devices with high efficiency and excellent stability on repetitive uses and materials therefor
Author/Inventor
Onokubo, Shunichi; Enokida, Toshio; Suda, Yasumasa; Toba, Yasumasa; Kimura, Yasunori; Kaneko, Tetsuya

Patent Assignee/Corporate Source
Toyo Ink Mfg. Co., Ltd., Japan

Source
Jpn. Kokai Tokkyo Koho, 35 pp. CODEN: JKKXAF

Document Type
Patent

Language
Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005085544	A	20050407	JP 2003-322556	20030916
JP 4382277	B2	20091209		

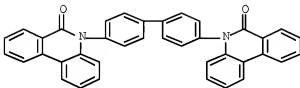
Abstract

The materials contain (a) compounds having double bond-containing electron-withdrawing groups on azacycle and (b) phosphorescent materials, where one of the double bond-forming two C atoms is a part of ring and the other is not. The azacycle compounds may be acridone derivatives. Organic LEDs having organic layers including one or more compounds of the above materials are further claimed.

Hit Structure

CAS Registry Number
764726-64-7 CAPLUS

Chemical or Trade Name
6[5H]-phenanthro[3,2-b:9,8-b']dipyrrole-2,9-dithienyl-9(1H)-one (9CI) (CA INDEX NAME)



06.CITING REF 00967: 1 THESE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITING REF)

LB ANSWER 34 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number
2004113942 CAPLUS [Full-text](#)
Document Number
14282001

Title
Color conversion film for organic electroluminescent device

Author/Inventor
Imura, Kyotoshi; Doi, Shuji

Patent Assignee/Corporate Source
Sumitomo Chemical Co., Ltd., Japan

Source
Jpn. Kokai Tokkyo Koho, 24 pp. CODEN: JKKXAF

Document Type
Patent

Language
Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004362910	A	20041224	JP 2003-199600	20030604

Abstract

The invention relates to a color conversion film, suited for use in an organic electroluminescent device, comprising a fluorescent and/or phosphorescent conjugated polymer.

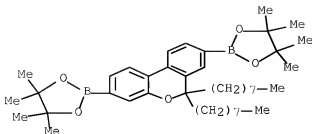
Hit Structure

CAS Registry Number
811823-84-9 CAPLUS

Chemical or Trade Name
2,2',3,3'-tetrakis[4,4'-bis(4-bromo-6-heptyl-2-thienyl)]-4,4'-biphenyl with
6,6'-diethynyl-3,3'-bis(4,4',5,5'-tetramethyl-1,2,3,2'-disubstituted-2-yl)-6,6'-
dibenzofuranopyran (9CI) (CA INDEX NAME)

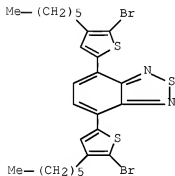
OK
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CIN 688013-75-4
CMT C41 864 52 05



CN
2

CFM 644579-39-9
CMF C26 H50 N2 O2



06 CITING REF COUNT: 1 THREE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)

LS ANSWER 28 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number
2004 928769 CAPLUS [Fulltext](#)

Document Number
141 403234

Title

Phenanthridones, their charge-transferring materials or electroluminescent materials, and organic electroluminescent devices using them

Author/Inventor

Takemichi, Masako; Sato, Hidaki

Patent Assignee/Corporate Source

Mitsubishi Chemical Corp., Japan

Source

Jpn. Kokai Tokkyo Koho, 49 pp. CODEN: JKOXAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004307390	A	20041104	JP 2003-102100	20030404

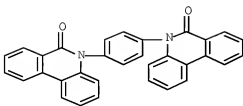
Abstract

The phenanthridones are 1 (X = n-valent linkage bonded to C or N atom in benzene rings, C and N atoms which are not bonded to the linkage may be substituted; n = 2, 3). Thus, 1 (X = 1,4-phenylene bonded to N, n = 2) was manufactured and used as a hole-preventing layer for an organic electroluminescent device showing low operation voltage.

Hit Structure

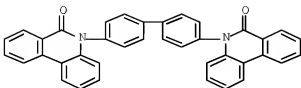
CAS Registry Number
166720-62-4 CAPLUS

Chemical or Trade Name
6-[5-(1-Phenanthridinone, 3,5'-[1,4-phenylene)]is- (CN INDEX NAME)



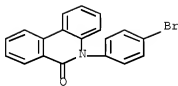
CAS Registry Number
766790-61-7 CAPLUS

Chemical or Trade Name
6-[5,5'-[1,1'-biphenyl]-4,4'-diylbis- (9CI) (CA INDEX NAME)



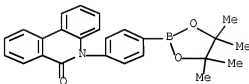
CAS Registry Number
766790-62-5 CAPLUS

Chemical or Trade Name
6-[5,5'-[4,4'-biphenyl]-2,2'-diylbis- (CA INDEX NAME)



CAS Registry Number
766790-63-6 CAPLUS

Chemical or Trade Name
6-[5,5'-[4,4'-biphenyl]-2,2'-diylbis- (CA INDEX NAME)



ON CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)

LB ANSWER 36 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number
2004-395502 CAPLUS F010301

Document Number
140 415047

Title
High-molecular compounds and polymer light-emitting devices made by using the same

Author/Inventor
Do, Shuji; Kobayashi, Satoshi; Noguchi, Takamasa

Patent Assignee/Corporate Source
Sumitomo Chemical Company, Limited, Japan

Source
PCT Int. Appl. 131 pp CODEN: PIXXDE

Document Type
Patent

Language
Japanese

Patent Information

PATENT NO	KIND	DATE	APPLICATION NO	DATE
WO 2004038859	A1	20040813	WO 2003-JP12697	20031003
JP 2004168999	A	20040817	JP 2003-343244	20031001
AU 2003268752	A1	20040525	AU 2003-268752	20031003
EP 1971170	A1	20030907	EP 2003-746697	20031003
US 20080138651	A1	20080612	US 2005-032937	20050428
JP 2009215557	A	20090924	JP 2009-67794	20090319

Abstract

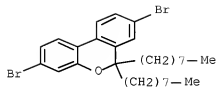
The invention relates to a high-mol. compts. comprising repeating units represented by the general formula I or II and having number-average mol. wts. of 103-108 in terms of poly(arylene) (I) [wherein Ar1 and Ar2 are each independently a trivalent aromatic hydrocarbon group or a trivalent heterocyclic group, and X1 and X2 are each independently O, S, C(=O), C(=O), SiO2, C(R1)(R2), Si(R3)(R4), N(R5), B(R6), P(R7), or P(=O)(R8), with the

provides that X1 and X2 must not be the same and that X1 and Ar2 are bonded resp. to the adjacent carbon atoms constituting the aromatic ring of Ar1, and X2 and Ar1 are bonded resp. to the adjacent carbon atoms constituting the aromatic ring of Ar2 (3) between Ar3 and Ar4 are each independently a trivalent aromatic hydrocarbon group or a trivalent heterocyclic group, and X3 and X4 are each independently N, B, P, C(=O), or Si(R10), with the proviso that X3 and X4 must not be the same and that X3 and Ar4 are bonded resp. to the adjacent carbon atoms constituting the aromatic ring of Ar3, and X4 and Ar3 are bonded resp. to the adjacent carbon atoms constituting the aromatic ring of Ar4

HR Structure

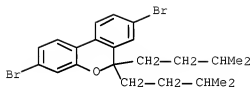
CAS Registry Number
688013-66-3 CAP105

Chemical or Trade Name
6,8-Dibromo-6,6-diisopropyl-3,4-dihydro-6,6-dioxy- (CA INDEX NAME)



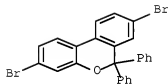
CAS Registry Number
688013-67-8 CAP105

Chemical or Trade Name
6,8-Dibromo-6,6-diisopropyl-3,4-dihydro-6,6-bis(3-methylbutyl)- (CA INDEX NAME)



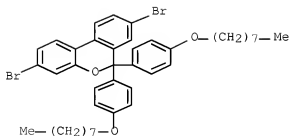
CAS Registry Number
688013-68-5 CAP105

Chemical or Trade Name
6,8-Dibromo-6,6-diphenyl-3,4-dihydro-6,6-dioxy- (CA INDEX NAME)



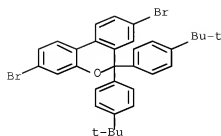
CAS Registry Number
688013-69-6 CAP105

Chemical or Trade Name
6,8-Dibromo-6,6-bis[4-(nonyloxy)phenyl]-3,4-dihydro-6,6-dioxy- (CA INDEX NAME)



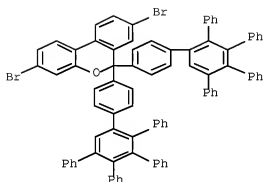
CAS Registry Number
688013-70-9 CAP105

Chemical or Trade Name
6,8-Dibromo-6,6-bis[4-(1,1-dimethylethyl)phenyl]-3,4-dihydro-6,6-dioxy- (CA INDEX NAME)



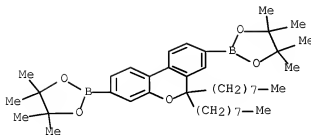
CAS Registry Number
68023-11-0 CAS105

Chemical or Trade Name
68-Dibenzofuran, 3,6-dibromo-6,6-bis(3',4',5'-terphenyl(1,1',2',1''-terphenyl)-6-yl)- (PCI) (CA INDEX NAME)



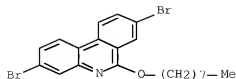
CAS Registry Number
68023-15-4 CAS105

Chemical or Trade Name
68-Dibenzofuran, 6,6-diisopropyl-2,8-bis(4,4',5,5'-tetramethyl-1,3,2-dioxaborolan-2-yl)- (CA INDEX NAME)



CAS Registry Number
68023-16-5 CAS105

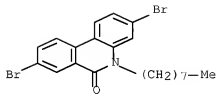
Chemical or Trade Name
Phenanthroline, 3,6-dibromo-6-(octyloxy)- (CA INDEX NAME)



CAS Registry Number

688013-11-6 CAS1/5

Chemical or Trade Name
6-(5B)-Phenanthridinone, 3,8-dibromo-5-octyl- (CA INDEX NAME)

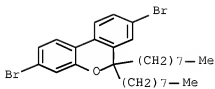


CAS Registry Number
688023-70-7 CAS1/5

Chemical or Trade Name
6B-Dibenz[b,d]pyran, 3,8-dibromo-6,6-diethyl-, homopolymer (9CI) (CA INDEX NAME)

CN 1

CFR 688013-66-3
CMF C29 H40 Br2 O

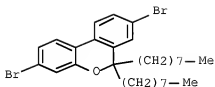


CAS Registry Number
688023-70-5 CAS1/5

Chemical or Trade Name
6B-Dibenz[b,d]pyran, 3,8-dibromo-6,6-diethyl-, polymer with 1,4-dibromo-2,5-bis(decyloxy)benzene (9CI) (CA INDEX NAME)

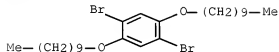
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CFR 688013-66-3
CMF C29 H40 Br2 O



CN 2

CFR 133269-99-3
CMF C26 H44 Br2 O2

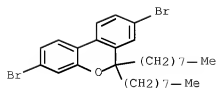


CAS Registry Number
688023-80-1 CAS1/5

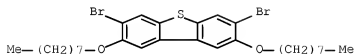
Chemical or Trade Name
6B-Dibenz[b,d]pyran, 3,8-dibromo-6,6-diethyl-, polymer with 3,7-dibromo-2,5-bis(decyloxy)dibenzothioephene (9CI) (CA INDEX NAME)

CN 1

CFR 688013-66-3
CMF C29 H40 Br2 O

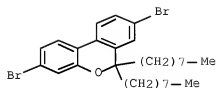


CN 2
 CFN 599212-67-6
 CMF C20 H38 Br2 O2 S

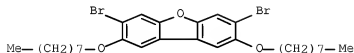


CAS Registry Number
 688013-81-2 (AFLI)S
 Chemical or Trade Name
 4,4'-Dibromo-2,2'-bis[2-methyl-2-oxo-1-(4-bromophenyl)ethylidene]dipyrane (PC1) (CA INDEX NAME)

CN 1
 CFN 688013-66-3
 CMF C29 H40 Br2 O

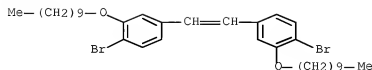


CN 2
 CFN 599212-92-7
 CMF C20 H38 Br2 O2

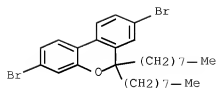


CAS Registry Number
 688013-83-6 (AFLI)S
 Chemical or Trade Name
 4,4'-Dibromo-2,2'-bis[2-methyl-2-oxo-1-(4-bromophenyl)ethylidene]dipyrane (PC1) (CA INDEX NAME)

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 CFN 688013-62-3
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CN 2
 CFN 688013-66-3
 CMF C29 H40 Br2 O

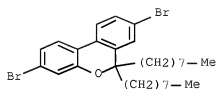


CAS Registry Number
680213-84-0 CN1/05

Chemical or Trade Name
Benzenamine, N,N-bis(4-bromophenyl)-4-(1-methylpropyl)-, polymer with
3,3'-dibromo-5,5'-diisopropyl-2,2'-bis(isopropylidene)pyrene (CN1) (CA INDEX NAME)

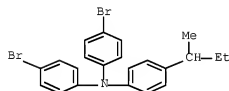
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CFR 680213-66-3
CMF C29 H40 Br2 O



CN
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CFR 257976-94-1
CMF C22 H21 Br2 N

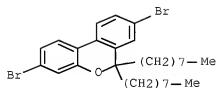


CAS Registry Number
680213-85-6 CN1/05

Chemical or Trade Name
1,4-Benzenediamine, N,N'-bis(4-bromophenyl)-N,N'-bis(4-butylphenyl)-,
polymer with 3,3'-dibromo-5,5'-diisopropyl-2,2'-bis(isopropylidene)pyrene (CN1) (CA INDEX NAME)

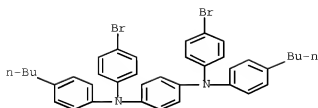
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CFR 680213-66-3
CMF C29 H40 Br2 O



CN
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CFR 372200-89-0
CMF C38 H39 Br2 N2

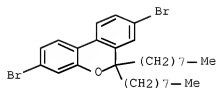


CAS Registry Number
688013-66-3 CASREG

Chemical or Trade Name
1,4-Bis[2,2'-(1,4-benzodioxin-5,5'-diyl)-4,4'-bis[4-bromophenyl]-n,n''-bis[4-(n-butyl)phenyl]-, polymer with 3,3'-dibromo-4,4'-diethyl-5,5'-bibenzofuran (PCL) (CA INDEX NAME)

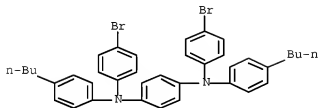
CN 1

CFR 688013-66-3
CMF C29 H40 Br2 0



CN 2

CFR 372200-89-0
CMF C38 H38 Br2 0

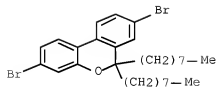


CAS Registry Number
688013-66-7 CASREG

Chemical or Trade Name
1,4-Bis[2,2'-(1,4-benzodioxin-5,5'-diyl)-4,4'-bis[4-bromophenyl]-n,n''-bis[4-(n-butyl)phenyl]-, polymer with 3,3'-dibromo-4,4'-diethyl-5,5'-bibenzofuran (PCL) (CA INDEX NAME)

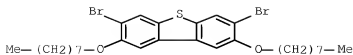
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CFR 688013-66-3
CMF C29 H40 Br2 0



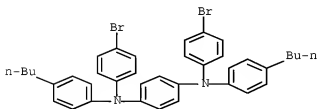
CN 2

CFR 599212-67-6
CMF C29 H38 Br2 0 0



CM
3

CFR 37220-99-0
CMF C38 H58 Br2 S2

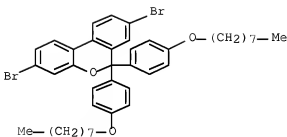


CAS Registry Number
685013-87-8 CMF1/03

Chemical or Trade Name
68-Gibeno(n,d)pyran, 3,6-dibromo-6,6'-bis[4-(7-methoxyheptyloxy)phenyl]-,
homopolymer (9C1) (CA INDEX NAME)

CM
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CFR 685013-69-6
CMF C41 H48 Br2 O3

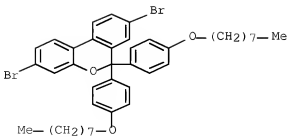


CAS Registry Number
685013-88-9 CMF1/03

Chemical or Trade Name
1,8-Benzenedianiline, N,N'-bis[4-bromophenyl]-N,N'-bis[4-(7-methoxyheptyloxy)phenyl]-,
polymer with 3,6-dibromo-6,6'-bis[4-(7-methoxyheptyloxy)phenyl]-68-dibenzene(n,d)pyran
(9C1) (CA INDEX NAME)

CM
1

CFR 685013-69-6
CMF C41 H48 Br2 O3



CM
2

CFR 372200-89-0

LB ANSWER 37 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number
2003-49489 CAPLUS [Fulltext](#)

Document Number
14032970

Title

Highly efficient red electrophosphorescent devices based on *isidium* isoquinoline complexes: Removable external quantum efficiency over a wide range of current

Author/Inventor

Su, Ying-Jui; Huang, Hsi-Lung; Li, Chien-Li; Chen, Chin-Hsiung; Tao, Yu-Tai; Chou, Pi-Tai; Datta, Swapnil; Liu, Rii-Chang

Patent Assignee/Corporate Source

Department of Chemistry, National Tsinghua University, Hsinchu, 30043, Taiwan

Source

Advanced Materials (Weinheim, Germany) (2003), 15(11), 894-898 CODEN ADVMEW, ISSN: 0955-9648

Document Type

Journal

Language

English

Abstract

Outstanding performance as an emissive dopant in organic light-emitting devices is shown by red phosphorescent Ir complexes based on an isoquinoline framework. Remarkably high efficiency can be maintained in the devices at high currents with a negligible effect from either triplet-triplet (T-T) annihilation or saturation of the excited states

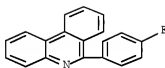
HR Structure

CAS Registry Number

632330-04-1 CAPLUS

Chemical or Trade Name

Fluoroethoxy-6-(4-fluorophenyl)- (CA INDEX NAME)



GO CITING REF COUNT: 142 THERE ARE 142 CAPLUS RECORDS THAT CITE THIS RECORD (146 CITINGS)

LB ANSWER 38 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number
2003-49492 CAPLUS [Fulltext](#)

Document Number
13636954

Title

Fluorescent polymer, their preparation and polymer light-emitting device

Author/Inventor

Kobayashi, Seisaku; Noguchi, Takanobu; Tsutsui, Yoshiaki; Kitano, Makoto; Doi, Shuji; Ueno, Takahiro; Nakazono, Aika

Patent Assignee/Corporate Source

Sumitomo Chemical Company, Limited, Japan

Source

Eur. Pat. Appl., 58 pp CODEN EPOXDW

Document Type

Patent

Language

English

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1318169	A1	20030611	EP 2002-236915	20021205
EP 1318169	B1	20100127		
SG 124249	A1	20060830	SG 2002-7189	20021127
JP 2002231741	A	20030819	JP 2002-347573	20021129
JP 4192578	B2	20081210		
TW 269841	B	20081221	TW 2002-91134721	20021129
US 20030168856	A1	20030911	US 2002-309101	20021204
EP 2067807	A1	20090610	EP 2009-4354	20021205
EP 2067808	A1	20090610	EP 2009-4355	20021205
US 20050042195	A1	20050224	US 2004-954223	20041001
US 7862478	B2	20100216		
US 20080109278	A1	20080501	US 2007-955798	20071213
JP 2008178821	A	20080807	JP 2008-17653	20080129
JP 200901804	A	20090108	JP 2008-174340	20080703

Abstract

A polymer of Mn 103-108 comprises a repeating unit I, where A1 = diacid group in which the bond distance ratio (bond distance of C(a)-A1 / bond distance of C(a)-C(b)) is ≥ 1.0 , R1-6 = H, alkyl, alkoxy, aryloxy, arylalkoxy, R2 and R3 or R4 and R5 may be connected to form a ring. The polymer is useful as a light-emitting material, a charge transporting material, etc.

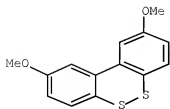
HR Structure

CAS Registry Number

540536-33-2 CAPLUS

Chemical or Trade Name

Dibenzocyclopentadiene, 2,2-dimethoxy- (CA INDEX NAME)

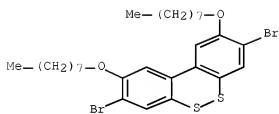


CAS Registry Number
540536-39-7 CAPLUS

Chemical or Trade Name
1,4-Bis(benzothienyl)-3,6-bis[4-(bromophenyl)-n,n'-bis[4-(n-butylphenoxy)]-], polymer with 3,8-dibromo-2,9-bis(octyloxy) dibenzo[*a,e'*][1,2]dithiin (BCI)
(CA INDEX NAME)

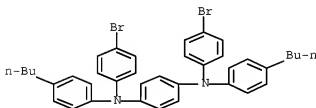
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CFR 540536-09-2
CMF C28 H30 Br2 O2 S2



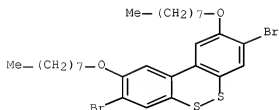
CN
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CFR 57220-09-0
CMF C28 H30 Br2 S2



CAS Registry Number
540536-09-2 CAPLUS

Chemical or Trade Name
Dibenzo[*a,e'*][1,2]dithiin, 3,8-dibromo-2,9-bis(octyloxy)- (CA INDEX NAME)



OF CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)

Title
Synthesis and luminescent characteristics of novel phosphorus containing light-emitting polymers

Author Inventor

Sun, Yi-Min

Patent Assignee/Corporate Source

Taiwan

Source
U.S. Pat. Appl. Publ., 10 pp. CODEN: USXXCO

Document Type

Patent

Language

English

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002/095222	A1	2002/12/19	US 2001-079963	2001/06/14

Abstract

The present invention relates to synthesis of novel luminescent phosphorus containing light-emitting polymers with improved luminescence efficiency. According to the proposed method, the electron-transporting chromophores are introduced into an emission polymer to increase its electron affinity. Further, several phosphorus-containing emission chromophores are synthesized and incorporated with electron-transporting chromophores finally resulting in the novel phosphorus chromophores emitting blue light as expected and with improved thermal stability of resulting polymers so that the absorption peaks of these polymers are restricted to a stable range. The polymers are useful as materials for light emitting diodes. Thus, 4-fluorobenzoic acid was treated with NEt₄H₂SO₄ in presence of polyphosphoric acid to give 2,5-bis(4-fluorobenzoyl)-1,3,4-oxadiazole monomer. This monomer was reacted with 6-hydroxy-6H-dibenz[*c,h*] [1,2]oxaphosphorin-6-one containing hydroquinone, 2-phenylhydroquinone, and 1,4-naphthoquinone. The obtained P-containing polyether-polyoxadiazoles showed good luminescent characteristics.

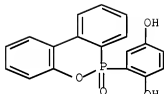
Hit Structure

CAS Registry Number
313271-84-0 C2F10S

Chemical or Trade Name
2,5-bis(4-fluorobenzoyl)-1,3,4-oxadiazole-6-(6-oxido-6H-dibenz[*c,h*] [1,2]oxaphosphorin-6-yl)-, polymer with 2,5-bis(4-fluorophenyl)-1,3,4-oxadiazole (PCL) (CA 33000X NAME)

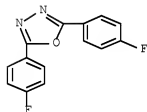
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CR
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CRN 324-01-2
CMF C14 H8 F2 N2 O

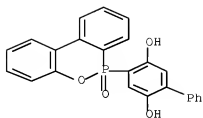


CAS Registry Number
313271-85-2 C2F10S

Chemical or Trade Name
[2,2'-(8-phenyl)-2,5-bis(4-fluorobenzoyl)-4-(6-oxido-6H-dibenz[*c,h*] [1,2]oxaphosphorin-6-yl)-1,3,4-oxadiazole]-, polymer with 2,5-bis(4-fluorophenyl)-1,3,4-oxadiazole (PCL) (CA INDEX NAME)

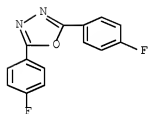
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CRN 313271-05-1
CMF C24 H17 O4 P



CM
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CFR 324-01-2
CMF C14 B0 F2 M2 O

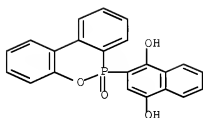


CAS Registry Number
31371-97-3 CAPLUS

Chemical or Trade Name
1,4-naphthalenediol, 2-(6-oxido-6H-dibenz[a,e][1,2]oxaphosphorin-6-yl)-,
polymer with 2,5-bis(4-fluorophenyl)-1,3,4-oxadiazole (9CI) (CA INDEX
RMS)

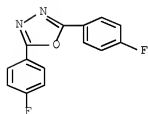
CM
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CFR 101394-28-5
CMF C22 B15 O4 F



CM
2

CFR 324-01-2
CMF C14 B0 F2 M2 O



Production of novel polymers with excellent electronic acceptability for electroluminescent materials

Author/Inventor
Yamamoto, Ryutchi, Cui, Bing-Ji

Patent Assignee/Corporate Source
TDK Corporation, Japan

Source
Jpn. Kokai Tokkyo Koho, 25 pp. CODEN: JHOXAF

Document Type
Patent

Language
Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002284862	A	20021003	JP 2001 06128	20010323

Abstract

The novel electronic-accepting polymer, useful as electrochromic materials and battery active materials, etc. (no data), possesses repeating unit structure shown by formula I as a principal chain, wherein X1 and X2 independently represent C (benzene ring) or N (pyridine ring). R1 and R2 independently represent substituent, k = 0, 1, 2 or 3 when forming benzene ring, and k = 0, 1 or 2 when forming pyridine ring; Y = 5-7 hetero membered ring. Thus, poly(diphenyl-2,4,7,8-tetrakispyridine-3,8-diyl) (bk = 3,000) was synthesized by polymerizing 3,8-dibromopyridyl-2,4,7,8-tetrakispyridine (0.41 g) in the presence of bis(1,5-cyclooctadienyl)nickel (0.88 g), 2,2'-bipyridine (0.41 g) and 1,5-cyclooctadiene (1.43 g) at 60-70° for 48 h.

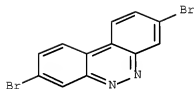
Hit Structure

CAS Registry Number
464895-31-5 CASIUS

Chemical or Trade Name
Bromo[cycloocta-1,5,8-triene-3,6-dibromo-, homopolymer (9CI) (CA INDEX NAME)

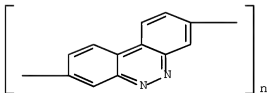
OK
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Chem 79500-35-1
CNF C12 H6 Br2 N2



CAS Registry Number
464895-30-3 CASIUS

Chemical or Trade Name
Poly(benzo[c]innoline-3,8-diyl) (9CI) (CA INDEX NAME)



08 CITING REF COUNT: 3 THERE ARE 3 CASIUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

LIB ANSWER 41 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number

2002 301831 CAPLUS [Full-text](#)

Document Number

137-217326

Title

Studies on the synthesis and optical properties of novel blue light-emitting polymers containing phosphorus and oxadiazole structures

Author/Inventor

Sun, Yi-Min, Hung, Albert Y. C.; Wang, Chih-Ta

Patent Assignee/Corporate Source

Department of Industrial Safety and Hygiene, Chung Hua College of Medical Technology, Tainan Hsien, Taiwan

Source

Journal of Applied Polymer Science (2002), 85(11), 3367-3376 CODEN: JAPNAB, ISSN: 0021-8995

Document Type

Journal

Language

English

Abstract

Novel phosphorus-containing polymers with high-electron-affinity oxadiazole were synthesized and characterized by thermal and spectroscopy (IR, ultra-violet-visible, photoluminescence, cyclic voltammetry) measurements. These new polymers can be used as blue electroluminescent materials and as electron-transport layers in polymer light-emitting diodes. In this study, aromatic polyethers containing electron-transporting chromophores and emission chromophore were synthesized from 2,3-bis(4-fluorophenyl)-1,2,4-oxadiazole and 2-(6-oxido-6H-dibenz[c,e][1,2]oxaphosphorin-6-yl)-1,4-naphthalenediol (DOPHBD). The effects of reaction temperature and time on the formation of polyethers were investigated to obtain optimum conditions for polyether manufacturing. All the resulting polymers were thermally stable at <460°C. The absorption peaks of these polymers were at 350-365 nm, whereas the photoluminescent peaks were at 460-481 nm. But, the intensity of polymer absorption decreased and a blue shift was observed in the photoluminescent spectra as the temperature increased. In addition, these polymers containing the electron-transporting oxadiazole indeed showed extra reduction potentials in cyclic voltammetry measurements.

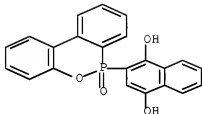
HR Structure

CAS Registry Number
313371-87-3 CAPLUS

Chemical or Trade Name
1,4-naphthalenediol, 2-(6-oxido-6H-dibenz[c,e][1,2]oxaphosphorin-6-yl)-,
polymer with 2,3-bis(4-fluorophenyl)-1,2,4-oxadiazole (PCT) (CA 130023
INDEX)

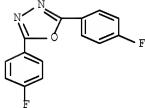
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CRN 101394-28-5
CMF C22 H15 O4 P



CN
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CRN 324-81-2
CMF C14 H8 F2 N2 O

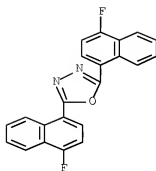


CAS Registry Number
495291-10-8 CAPLUS

Chemical or Trade Name
1,4-naphthalenediol, 2-(6-oxido-6H-dibenz[c,e][1,2]oxaphosphorin-6-yl)-,
polymer with 2,3-bis(4-fluorophenyl)-1,2,4-oxadiazole (PCT) (CA
INDEX NAME)

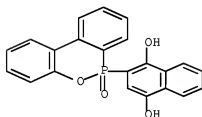
CN
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CRN 148140-89-0
CMF C22 H12 F2 N2 O



CN
2

CHE 107394-28-5
CMF C22 H15 O4 F

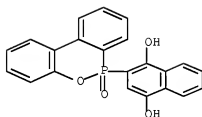


CAS Registry Number
455291-12-0 CAPLUS

Chemical or Trade Name
1,4-naphthalenediol, 2-(6-oxido-6H-dibenz[a,e][1,2]oxaphosphorin-6-yl)-,
polymers with 1,6-dichloroheptane (PCH) (OR 190EX NAME)

CN
1

CHE 107394-28-5
CMF C22 H15 O4 F



CN
2

CHE 629-03-0
CMF C6 H12 Br2

Br—(CH₂)₆—Br

OR CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS
RECORD (12 CITINGS)

LF ANSWER 42 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number
2000 833285 CAPLUS [Ref 364](#)
Document Number
13422342

Title Hole-transporting phenanthrene derivatives having naphthalene substituents and organic electroluminescent devices thereof
Author Inventor

to: Yuichi Ogino, Kenji Sato, Hisaya
Patent Assignee/Corporate Source
Toppan Printing Co., Ltd., Japan

Source
Jpn. Kokai Tokkyo Koho, 6 pp. CODEN JKKXAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000327664	A	2000/11/28	JP 1999-133808	1999/05/17

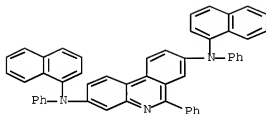
Abstract

The claimed device, are represented by i (R1 = Me, Et, aryl, diarylamino, R2 = Ph, tolyl, naphthyl, etc.) which show excellent heat resistance and low resistivity

HR Structure

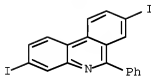
CAS Registry Number
309756-10-7 CAPLUS

Chemical or Trade Name
3,5-Bis(aminophenyl)indole, N3,N6-di-1-naphthalenyl-N3,N6,6-triphenyl- (CA
INDEX NAME)



CAS Registry Number
309756-10-6 CAPLUS

Chemical or Trade Name
Phenanthroline, 3,9-diiodo-6-phenyl- (CA INDEX NAME)



LB ANSWER 43 OF 48 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number
2000 73937 CAPLUS Fulltext
Document Number
134-176519

Title

Preparation of organic light-emitting polymers and study of film structure influence on luminescent characteristics

Author(s)

Gan, Yi-Min, Lu, H. H., Jiang, Fu-Shyang, Tsai, Y. S.

Patent Assignee/Corporate Source

Department of Industrial Safety and Hygiene, Chung Hua Institute of Technology, Taiwan, Taiwan

Source

Proceedings of SPIE-The International Society for Optical Engineering (2000), 3938/Organic Photonic Materials and Devices II, 236-246 CODEN PRISDG, ISSN 0277-786X

Document Type

Journal

Language

English

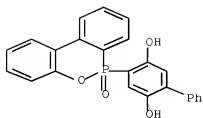
Abstract

Electron-transporting chromophores were introduced to emission polymer to increase its electron affinity. Several emission chromophores also were synthesized to polycondensate with electron transporting chromophores. The influence of structure on optoelectronic properties was studied. 2,5-Bis(4-fluorophenyl)-1,3,4-oxadiazole and 9,10-dihydro-9,10-phosphaphenanthrene-10-oxide (DOPQ) derivs. were used as electron transport and emission monomers, resp. The DOPQ derivs. that contain benzene, biphenylene, or 1,4-naphthylene were synthesized. The emission units exhibit blue light as expected. Aromatic polyethers were obtained by nucleophilic displacement reaction of oxadiazole-activated bis(halide) monomers with bis(phenol) monomers. All the resulted polymers are thermally stable >400°. The absorption peaks of these polymers vary between 305-350 nm, while the photoluminescence peaks vary between are 377-464 nm.

HR Structure

CAS Registry Number
312771-80-1 CAPLUS

Chemical or Trade Name
[1,1'-Bis(phenyl)-2,2'-diol], 4-[6-oxido-6H-dibenz(c,e)[1,2]oxaphosphorin-6-yl]- (CA INDEX NAME)

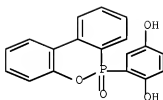


CAS Registry Number
313271-84-0 CAPIOS

Chemical or Trade Name
1,4-benzenediol, 2-(6-oxido-6H-dibenz[c,e][1,2]oxaphosphorin-6-yl)-, polymer with 2,5-bis(4-fluorophenyl)-1,3,4-oxadiazole (PCE) (CA 136263 H066)

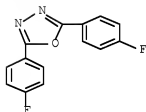
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CFR 9920R-10-1
CMF C18 H13 O4 F



CM
2

CFR 334-01-2
CMF C14 H0 F2 H2 O

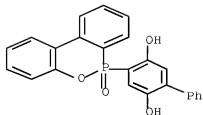


CAS Registry Number
313271-84-2 CAPIOS

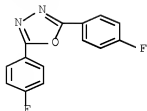
Chemical or Trade Name
[2,1'-Biphenyl]-2,5-diyl, 4-(6-oxido-6H-dibenz[c,e][1,2]oxaphosphorin-6-yl)-, polymer with 2,5-bis(4-fluorophenyl)-1,3,4-oxadiazole (PCE) (CA 136263 H066)

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CFR 313271-05-1
CMF C24 H17 O4 F



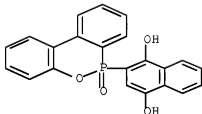
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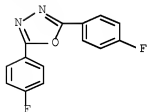
CAS Registry Number
 313271-87-3 CAPLUS

Chemical or Trade Name
 1,4-bis(4-fluorophenyl)-1,2,4-oxadiazole, 2-(6-oxido-6H-dibenz[e,h][1,2]oxaphosphorin-6-yl)-, polymer with 2,5-bis(4-fluorophenyl)-1,3,4-oxadiazole (PCT) (CN 330224)

CN 1
 CEN 101394-28-5
 CMF C22 B15 O4 F



CN 2
 CEN 324-01-2
 CMF C14 BB F2 N2 O



LB ANSWER 44 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number
 2000719761 CAPLUS [Full Text](#)
 Document Number
 12487319

Title
 Synthesis and luminescent characteristics of novel phosphorus containing **light-emitting** polymers

Author/Inventor
 Ben Y.-M. Wang, C.-S.
 Patent Assignee/Corporate Source
 ROC, Department of Industrial Safety and Hygiene, Chung Hwa Institute of Technology, Tainan Hsien, Jen-Ta Hsiang, Taiwan
 Source
 Polymer (2000), Volume Date 2001, 42(3), 1035-1045 CODEN: POLMAG, ISSN: 0021-3861

Document Type
 Journal

Language
 English

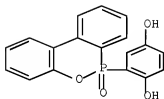
Abstract
 Organic light-emitting diodes (OLEDs) have been developed recently, however, the efficiency of electroluminescent devices needs to be further improved. The electron-transporting chromophores were introduced into an emission polymer to increase its electron affinity. Several phosphorus-containing emission chromophores were synthesized and incorporated with electron-transporting chromophores. The effect of different structures on the optoelectronic properties was investigated in detail. 2,5-Bis-(4-fluorophenyl)-1,3,4-oxadiazole and 9,10-dihydro-oxa-10-phosphaphenanthrene-10-oxide (DOPPO) derivatives were used as electron transport and emission monomers, respectively. The DOPPO derivatives that contain benzene, biphenyl, or 1,4-naphthalene were synthesized. The emission chromophores emit blue light as expected. Aromatic polyethers were obtained by nucleophilic substitution reaction of oxadiazole-substituted bis(halide) monomers with bis(phenol) monomers. All the resulting polymers were thermally stable below 450°C. The absorption peaks of these polymers varied from 325 to 350 nm, while the photoluminescent peaks varied from 377 to 464 nm.

H6 Structure
 CAS Registry Number
 313271-84-0 CAPLUS

Chemical or Trade Name
 1,4-bis(methylene)-2-(5-oxido-6H-dibenzo[*a,e*][1,2]oxaphosphorin-6-yl)-2,
 polymer with 2,5-bis(4-fluorophenyl)-3,4-oxadiazole (PCI) (CA INDEX
 NAME)

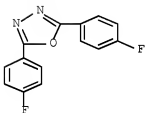
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CFN 59208-50-1
 CMF C18 H13 O4 P



CM
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CFN 324-01-2
 CMF C14 H8 F2 N2 O

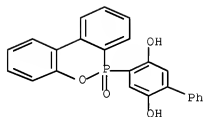


CAS Registry Number
 313271-05-2 CMPLDS

Chemical or Trade Name
 (1,1'-Biphenyl)-2,2'-diyl, 8-16-oxido-6H-dibenzo[*a,e*][1,2]oxaphosphorin-6-
 yl)-, polymer with 2,5-bis(4-fluorophenyl)-3,4-oxadiazole (PCI) (CA
 INDEX NAME)

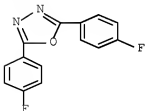
CM
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CFN 313271-05-3
 CMF C24 H17 O4 P



CM
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CFN 324-01-2
 CMF C14 H8 F2 N2 O



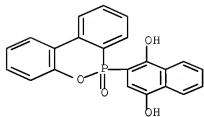
CAS Registry Number

513271-87-3 CAPLUS

Chemical or Trade Name
1,4-bis(4-fluorophenyl)-2-(6-oxido-6H-dibenz[*a,e*][1,2]oxaphosphorin-6-yl)-,
polymer with 2,5-bis(4-fluorophenyl)-3,4-oxadiazole (PCI) (CA 18086
H005)

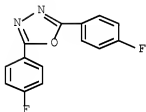
CM
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CRM 107104-28-5
CWF C23 033 04 P



CM
2

CRM 334-01-3
CWF C14 00 P2 N2 O



08 CITING REF COUNT: 21 THERE ARE 21 CAPLUS RECORDS THAT CITE THIS
RECORD (21 CITINGS)

LB ANSWER 48 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number 1998-01-4428 CAPLUS [Full-text](#)

Document Number 129-283255

Title

Organic film, organic electroluminescent device, and electrophotographic photoreceptor

Author/Inventor

Hamada, Waji, Sano, Kenji, Fujita, Masayuki, Nishio, Yoshihiko, Shibata, Kenichi

Patent Assignee/Corporate Source

Sanyo Electric Co., Ltd., Japan

Source

Jpn. Kokai Tokkyo Koho, 7 pp. CODEN JKKXAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10231634	A	1998-09-02	JP 1997-54962	1997-03-10
JP 3557071	B2	2004-08-25		

Abstract

The film contains a phenanthridine derivative I or a diphenylamino group-containing phenanthridine derivative II (R1: S = C₆H₄-1, cyano, NHR, alkyl, halo, H, O, R = H, CnH_{2n+1}, n = 1-10). The device has a hole- or electron-transporting layer containing the film and a light-emitting layer between a hole-injecting electrode and an electron-injecting electrode. The device contains the derivative as a dopant in the light-emitting layer. The photoreceptor contains the hole-transporting layer.

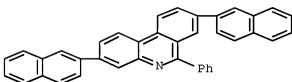
HR Structure

CAS Registry Number

213322-10-2 CAS105

Chemical or Trade Name

Phenanthridine, 3,6-bis(2-naphthalenyl)-6-phenyl- (CA INDEX NAME)

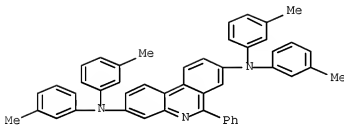


CAS Registry Number

213322-15-3 CAPLUS

Chemical or Trade Name

3,6-bis(2-methyl-4-methoxyphenyl)-9-(3-methylphenyl)-6-phenylphenanthridine (CA INDEX NAME)



LB ANSWER 48 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number 1998-01-5203 CAPLUS [Full-text](#)

Document Number 129-234014

Title

Manufacture of electroluminescence device

Author/Inventor

Sato, Yoshiharu, Kamei, Hiroaki, Ichimasa, Akiko

Patent Assignee/Corporate Source

Mitsubishi Chemical Corp., Japan

Source

Jpn. Kokai Tokkyo Koho, 10 pp. CODEN JKKXAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08185979	A	1996-07-16	JP 1995-318	1995-01-05
JP 3552317	B2	2004-08-11		

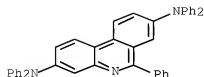
Abstract

The manufacture of an electroluminescence device, involves the aging treatment of the device, applying 5-1000 times of the c.d. used in the normal operation.

HR Structure

CAS Registry Number
171431-27-1 CAPLUS

Chemical or Trade Name
3,8-Phenanthridinediamine, N3,N3,N9,N9,6-pentaphenyl- (CA INDEX NAME)



LB ANSWER 47 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number

1995 974186 CAPLUS [Fujitsu](#)

Document Number

124 18060

Title

Organic field-effect electroluminescent device with high luminance

Author/Inventor

Sato, Yoshiharu, Ichimasa, Akio

Patent Assignee/Corporate Source

Mitsubishi Kagaku KK, Japan

Source

Jpn. Kokai Tokkyo Koho, 10 pp. CODEN: JKKOAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07232474	A	19951003	JP 1994-43569	19940316
JP 3284737	B2	20020820		

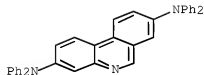
Abstract

The device has an organic hole-transporting layer containing an aryl amine I (Ar1: 2 = (substituted) aryl, biphenyl, aromatic heterocyclic group, R1: 7 = H, halo, OH, (substituted) unsaturated aliphatic hydrocarbon, aromatic hydrocarbon, alkoxy, carbonyl, alkoxy, silyloxy, dialkylamino, diarylamino) and an organic light-emitting layer between a cathode and an anode. The device shows high luminance and luminescent efficiency.

HN Structure

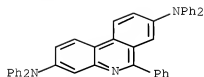
CAS Registry Number
171431-26-2 CAPLUS

Chemical or Trade Name
3,8-Phenanthridinediamine, N3,N3,N9,N9,6-tetraphenyl- (CA INDEX NAME)



CAS Registry Number
171431-27-1 CAPLUS

Chemical or Trade Name
3,8-Phenanthridinediamine, N3,N3,N9,N9,6-pentaphenyl- (CA INDEX NAME)



LB ANSWER 48 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number

1995 794902 CAPLUS [Fujitsu](#)

Document Number

123 18561

Title

Functional thin film production and application thereof

Author/Inventor

Sai, Tetsuo

Patent Assignee/Corporate Source

Dainichiseika Color Chem., Japan

Source

Jpn. Kokai Tokkyo Koho, 41 pp. CODEN: JKKOAF

Document Type

Patent

Language

Japanese Patent Information				
PATENT NO	KIND	DATE	APPLICATION NO	DATE
JP 07062594	A	19950307	JP 1993-234361	19930827
JP 2823424	B2	19981118		

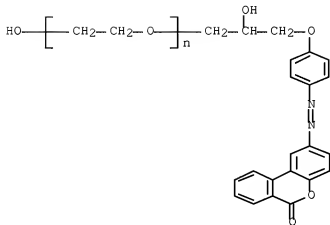
Abstract

The title film, useful for a color filter, electrophotographic device, photosensor, solar cell, electroluminescence device, optical recording device, optical nonlinear device, optoelectronic device, photochromic film, electrochromic film, gas sensor and ion sensor, is prepared by an electrochromic reduction of a surfactant containing an aromatic azo residue, dispersed in a water or water containing solvent. The title method requires min. or zero use of binder resin.

Hit Structure

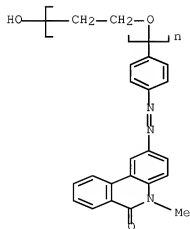
CAS Registry Number
167856-97-5 CASLIS

Chemical or Trade Name
Poly(oxy-1,2-ethanediyl), α -[2-hydroxy-3-[4-[(6-azo-6H-dibenz[2,4]pyrimidin-2-yl)azo]phenoxy]propyl]- ω -hydroxy- (9CI) (CA INDEX NAME)



CAS Registry Number
167851-03-0 CASLIS

Chemical or Trade Name
Poly(oxy-1,2-ethanediyl), α -[4-[(5,6-dihydro-5-methyl-6-azo-2-phenanthridinyl)azo]phenyl]- ω -hydroxy- (9CI) (CA INDEX NAME)



LB ANSWER 49 OF 49 CAPLUS COPYRIGHT 2010 ACS on STN

Accession Number

1993283371 CAPLUS [Full-text](#)

Document Number

122.67927

Title

Organic electroluminescent devices

Author/Inventor

Ohkubo, Toyoko; Suzuki, Shinichi; Takeuchi, Shigeki

Patent Assignee/Corporate Source

Kanichiroku Photo Ind., Japan

Source

Jpn. Kokai Tokkyo Koho, 15 pp. CODEN: JKKXAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06122874	A	1994-05-06	JP 1993-205660	1993-06-24

Abstract

The devices contain electron-transporting and phosphor layers of I or II. In I, R1 = (substituted) Ph, biphenyl, benzyl, alkyl, alkoxy; and R2,3 = (substituted) alkyl, alkoxy, aralkyl, aryl, alkyl amine, halo-alkyl, H, halo, NO2, CN, heterocyclic. In II, R1,2 are the same as R2,3 in I.

Hit Structure

CAS Registry Number

161028-45-3 CAPLUS

Chemical or Trade Name

6B-Dibenz(b,d)pyran-6-one, 10-(dimethylamino)- (CA INDEX NAME)

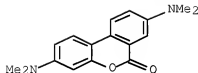


CAS Registry Number

161028-46-3 CAPLUS

Chemical or Trade Name

6B-Dibenz(b,d)pyran-6-one, 3,8-bis(dimethylamino)- (CA INDEX NAME)

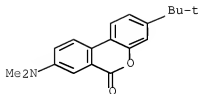


CAS Registry Number

161028-47-4 CAPLUS

Chemical or Trade Name

6B-Dibenz(b,d)pyran-6-one, 8-(dimethylamino)-3-((1,1-dimethylethyl)- (CA INDEX NAME)



08 CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

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Executing the logoff script----